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F3 Study Text
Financial Accounting

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Paper F3

Financial Accounting

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Paper F3 *Financial Accounting* which is:

- Written by tutors
- Comprehensive but concise
- In simple English
- Used around the world by Emile Woolf
Colleges including China, Russia and the
UK



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Contents

	<i>Page</i>
Syllabus and study guide	1
Chapter 1: The context and purpose of financial reporting	15
Chapter 2: Qualitative characteristics of financial information	39
Chapter 3: The accounting equation and double-entry book-keeping	49
Chapter 4: Recording transactions: sales, purchases and cash	79
Chapter 5: Inventory	103
Chapter 6: Non-current assets	125
Chapter 7: Accruals and prepayments. Receivables and payables	165
Chapter 8: Provisions and contingencies	195
Chapter 9: Capital structure and finance costs	211
Chapter 10: Trial balance, correcting errors and suspense accounts	239
Chapter 11: Control accounts and bank reconciliations	259
Chapter 12: Preparing financial statements	275
Chapter 13: Statements of cash flows	303
Chapter 14: Incomplete records	335
Chapter 15: Preparing simple consolidated financial statements	349
Chapter 16: Interpretation of financial statement	391
Answers to exercises and multiple choice questions	379
Practice questions	413
Answers to practice questions	433
Index	463



Syllabus and study guide

Aim

To develop knowledge and understanding of the underlying principles and concepts relating to financial accounting and technical proficiency in the use of double-entry accounting techniques including the preparation of basic financial statements.

Main capabilities

On successful completion of this paper, you should be able to:

- A** Explain the context and purpose of financial reporting
- B** Define the qualitative characteristics of financial
- C** Demonstrate the use of double entry and accounting systems
- D** Record transactions and events
- E** Prepare a trial balance (including identifying and correcting errors)
- F** Prepare basic financial statements for incorporated and unincorporated entities.
- G** Prepare simple consolidated financial statements
- H** Interpret financial statements

Rationale

The syllabus for Paper FFA/F3, *Foundations of Financial Accounting*, introduces the candidate to the fundamentals of the regulatory framework relating to accounts preparation and to the qualitative characteristics of useful information. The syllabus then covers drafting financial statements and to principles of accounts preparation. The syllabus then concentrates in depth on recording, processing, and reporting business transactions and events. The syllabus then covers the use of the

trial balance and how to identify and correct errors, and then the preparation of financial statements for incorporated and unincorporated entities. The syllabus then moves in two directions, firstly requiring candidates to be able to conduct a basic interpretation of financial statements; and secondly requiring the preparation of simple consolidated financial statements from the individual financial statements of group incorporated entities.

Syllabus

A The context and purpose of financial reporting

- 1 The scope and purpose of, financial statements for external reporting
- 2 Users' and stakeholders' needs
- 3 The main elements of financial reports
- 4 The regulatory framework (legislation and regulation, reasons and limitations, relevance of accounting standards)
- 5 Duties and responsibilities of those charged with governance

B The qualitative characteristics of financial information

- 1 The qualitative characteristics of financial reporting

C The use of double-entry and accounting systems

- 1 Double-entry book-keeping principles including the maintenance of accounting records and sources of information
- 2 Ledger accounts, books of prime entry and journals

D Recording transactions and events

- 1 Sales and purchases
- 2 Cash
- 3 Inventory
- 4 Tangible non-current assets
- 5 Depreciation
- 6 Intangible non-current assets and amortisation
- 7 Accruals and prepayments
- 8 Receivables and payables
- 9 Provisions and contingencies
- 10 Capital structure and finance costs

E Preparing a trial balance

- 1 Trial balance
- 2 Correction of errors
- 3 Control accounts and reconciliations
- 4 Bank reconciliations
- 5 Suspense accounts

F Preparing basic financial statements

- 1 Statements of financial position
- 2 Income statements and statements of comprehensive income
- 3 Disclosure notes
- 4 Events after the reporting period
- 5 Statements of cash flows (excluding partnerships)
- 6 Incomplete records

G Preparing simple consolidated financial statements

- 1 Subsidiaries
- 2 Associates

H Interpretation of financial statements

- 1 Importance and purpose of analysis of financial statements
- 2 Ratios
- 3 Analysis of financial statements

Approach to examining the syllabus

The syllabus is assessed by a two hour paper-based or computer-based examination. Questions will assess all parts of the syllabus and will include both computational and non-computational elements. The examination will consist of 50 two mark questions.

Study guide

A The context and purpose of financial reporting**1 The scope and purpose of, financial statements for external reporting**

- (a) Define financial reporting – recording, analysing and summarising financial data.
- (b) Identify and define types of business entity – sole trader, partnership, limited liability company.
- (c) Recognise the legal differences between a sole trader, partnership and a limited liability company.
- (d) Identify the advantages and disadvantages of operating as a limited liability company, sole trader or partnership.
- (e) Understand the nature, principles and scope of financial reporting.

2 Users' and stakeholders' needs

- (a) Identify the users of financial statements and state and differentiate between their information needs.

3 The main elements of financial reports

- (a) Understand and identify the purpose of each of the main financial statements.
- (b) Define and identify assets, liabilities, equity, revenue and expenses.

4 The regulatory framework

- (a) Understand the role of the regulatory system including the roles of the IFRS Foundation (IFRSF), the International Accounting Standards Board (IASB), the IFRS Advisory Council (IFRS AC) and the IFRS Interpretations Committee (IFRS IC).
- (b) Understand the role of International Financial Reporting Standards.

5 Duties and responsibilities of those charged with governance

- (a) Explain what is meant by governance specifically in the context of the preparation of financial statements.
- (b) Describe the duties and responsibilities of directors and other parties covering the preparation of the financial statements.

B The qualitative characteristics of financial information

1 The qualitative characteristics of financial reporting

- (a) Define, understand and apply accounting concepts and qualitative characteristics:
 - (i) Fair presentation
 - (ii) Going concern
 - (iii) Accruals
 - (iv) Consistency
 - (v) Materiality
 - (vi) Relevance
 - (vii) Reliability
 - (viii) Faithful representation
 - (ix) Substance over form
 - (x) Neutrality
 - (xi) Prudence
 - (xii) Completeness
 - (xiii) Comparability
 - (xiv) Understandability

- (xv) Business entity concept
- (b) Understand the balance between qualitative characteristics.

C The use of double-entry and accounting systems

1 Double-entry book-keeping principles including the maintenance of accounting records

- (a) Identify and explain the function of the main data sources in an accounting system.
- (b) Outline the contents and purpose of different types of business documentation, including: quotation, sales order, purchase order, goods received note, goods despatched note, invoice, statement, credit note, debit note, remittance advice, receipt.
- (c) Understand and apply the concept of double entry accounting and the duality concept.
- (d) Understand and apply the accounting equation.
- (e) Understand how the accounting system contributes to providing useful accounting information and complies with organisational policies and deadlines.
- (f) Identify the main types of business transactions e.g. sales, purchases, payments, receipts.

2 Ledger accounts, books of prime entry and journals

- (a) Identify the main types of ledger accounts and books of prime entry, and understand their nature and function.
- (b) Understand and illustrate the uses of journals and the posting of journal entries into ledger accounts.
- (c) Identify correct journals from given narrative.
- (d) Illustrate how to balance and close a ledger account.

D Recording transactions and events

1 Sales and purchases

- (a) Record sale and purchase transactions in ledger accounts.
- (b) Understand and record sales and purchase returns.
- (c) Understand the general principles of the operation of a sales tax.
- (d) Calculate sales tax on transactions and record the consequent accounting entries.
- (e) Account for discounts allowed and discounts received.

2 Cash

- (a) Record cash transactions in ledger accounts.
- (b) Understand the need for a record of petty cash transactions.

3 Inventory

- (a) Recognise the need for adjustments for inventory in preparing financial statements.
- (b) Record opening and closing inventory.
- (c) Identify the alternative methods of valuing inventory.
- (d) Understand and apply the IASB requirements for valuing inventories.
- (e) Recognise which costs should be included in valuing inventories.
- (f) Understand the use of continuous and period end inventory records.
- (g) Calculate the value of closing inventory using FIFO (first in, first out) and AVCO (average cost).
- (h) Understand the impact of accounting concepts on the valuation of inventory.
- (i) Identify the impact of inventory valuation methods on profit and on assets.

4 Tangible non-current assets

- (a) Define non-current assets.
- (b) Recognise the difference between current and non-current assets.
- (c) Explain the difference between capital and revenue items.
- (d) Classify expenditure as capital or revenue expenditure.
- (e) Prepare ledger entries to record the acquisition and disposal of non-current assets.
- (f) Calculate and record profits or losses on disposal of non-current assets in the income statement including part-exchange transactions.
- (g) Record the revaluation of a non-current asset in ledger accounts, the statement of comprehensive income and the statement of financial position.
- (h) Calculate the profit or loss on disposal of a revalued asset.
- (i) Illustrate how non-current asset balances and movements are disclosed in financial statements.
- (j) Explain the purpose and function of an asset register.

5 Depreciation

- (a) Understand and explain the purpose of depreciation.
- (b) Calculate the charge for depreciation using straight line and reducing balance methods.
- (c) Identify the circumstances where different methods of depreciation would be appropriate.
- (d) Illustrate how depreciation expense and accumulated depreciation are recorded in ledger accounts.
- (e) Calculate depreciation on a revalued non-current asset, including the transfer of excess depreciation between the revaluation reserve and retained earnings.
- (f) Calculate the adjustments to depreciation necessary if changes are made in the estimated useful life and/or residual value of a non-current asset.
- (g) Record depreciation in the income statement and statement of financial position.

6 Intangible non-current assets and amortisation

- (a) Recognise the difference between tangible and intangible non-current assets.
- (b) Identify types of intangible assets.
- (c) Identify the definition and treatment of 'research costs' and 'development costs' in accordance with International Financial Reporting Standards.
- (d) Calculate amounts to be capitalised as development expenditure or to be expensed from given information.
- (e) Explain the purpose of amortisation.
- (f) Calculate and account for the charge for amortisation.

7 Accruals and prepayments

- (a) Understand how the matching concept applies to accruals and prepayments.
- (b) Identify and calculate the adjustments needed for accruals and prepayments in preparing financial statements.
- (c) Illustrate the process of adjusting for accruals and prepayments in preparing financial statements.
- (d) Prepare the journal entries and ledger entries for the creation of an accrual or prepayment.
- (e) Understand and identify the impact on profit and net assets of accruals and prepayments.

8 Receivables and payables

- (a) Explain and identify examples of receivables and payables.
- (b) Identify the benefits and costs of offering credit facilities to customers.
- (c) Understand the purpose of an aged receivables analysis.
- (d) Understand the purpose of credit limits.
- (e) Prepare the bookkeeping entries to write off a bad (irrecoverable) debt.
- (f) Record a bad (irrecoverable) debt recovered.
- (g) Identify the impact of bad (irrecoverable) debts on the income statement and on the statement of financial position.
- (h) Prepare the bookkeeping entries to create and adjust an allowance for receivables.
- (i) Illustrate how to include movements in the allowance for receivables in the income statement and how the closing balance of the allowance should appear in the statement of financial position.
- (j) Account for contras between trade receivables and payables.
- (k) Prepare, reconcile and understand the purpose of supplier statements.
- (l) Classify items as current or non-current liabilities in the statement of financial position.

9 Provisions and contingencies

- (a) Understand the definition of 'provision', 'contingent liability' and 'contingent asset'.
- (b) Distinguish between and classify items as provisions, contingent liabilities or contingent assets.
- (c) Identify and illustrate the different methods of accounting for provisions, contingent liabilities and contingent assets.
- (d) Calculate provisions and changes in provisions.
- (e) Account for the movement in provisions.
- (f) Report provisions in the final accounts.

10 Capital structure and finance costs

- (a) Understand the capital structure of a limited liability company including:
 - (i) Ordinary shares
 - (ii) Preference shares (redeemable and irredeemable)
 - (iii) Loan notes.

- (b) Record movements in the share capital and share premium accounts.
- (c) Identify and record the other reserves which may appear in the company statement of financial position.
- (d) Define a bonus (capitalisation) issue and its advantages and disadvantages.
- (e) Define a rights issue and its advantages and disadvantages.
- (f) Record and show the effects of a bonus (capitalisation) issue in the statement of financial position.
- (g) Record and show the effects of a rights issue in the statement of financial position.
- (h) Record dividends in ledger accounts and the financial statements.
- (i) Calculate and record finance costs in ledger accounts and the financial statements.
- (j) Identify the components of the statement of changes in equity.

E Preparing a trial balance

1 Trial balance

- (a) Identify the purpose of a trial balance.
- (b) Extract ledger balances into a trial balance.
- (c) Prepare extracts of an opening trial balance.
- (d) Identify and understand the limitations of a trial balance.

2 Correction of errors

- (a) Identify the types of error which may occur in bookkeeping systems.
- (b) Identify errors which would be highlighted by the extraction of a trial balance.
- (c) Prepare journal entries to correct errors.
- (d) Calculate and understand the impact of errors on the income statement, statement of comprehensive income and statement of financial position.

3 Control accounts and reconciliations

- (a) Understand the purpose of control accounts for accounts receivable and accounts payable.
- (b) Understand how control accounts relate to the double-entry system.
- (c) Prepare ledger control accounts from given information.

- (d) Perform control account reconciliations for accounts receivable and accounts payable.
- (e) Identify errors which would be highlighted by performing a control account reconciliation.
- (f) Identify and correct errors in control accounts and ledger accounts.

4 Bank reconciliations

- (a) Understand the purpose of bank reconciliations.
- (b) Identify the main reasons for differences between the cash book and the bank statement.
- (c) Correct cash book errors and/or omissions.
- (d) Prepare bank reconciliation statements.
- (e) Derive bank statement and cash book balances from given information.
- (f) Identify the bank balance to be reported in the final accounts.

5 Suspense accounts

- (a) Understand the purpose of a suspense account.
- (b) Identify errors leading to the creation of a suspense account.
- (c) Record entries in a suspense account.
- (d) Make journal entries to clear a suspense account.

F Preparing basic financial statements

1 Statements of financial position

- (a) Recognise how the accounting equation and business entity convention underlie the statement of financial position.
- (b) Understand the nature of reserves.
- (c) Identify and report reserves in a company statement of financial position.
- (d) Prepare extracts of a statement of financial position from given information.
- (e) Understand why the heading retained earnings appears in a company statement of financial position.

2 Income statements and statements of comprehensive income

- (a) Prepare extracts of an income statement and statement of comprehensive income from given information.

- (b) Understand how accounting concepts apply to revenue and expenses.
- (c) Calculate revenue, cost of sales, gross profit, profit for the year and total comprehensive income from given information.
- (d) Disclose items of income and expenditure in the income statement.
- (e) Record income taxes in the income statement of a company, including the under and over-provision of tax in the prior year.
- (f) Understand the interrelationship between the statement of financial position, income statement and statement of comprehensive income.
- (g) Identify items requiring separate disclosure on the face of the income statement.

3 Disclosure notes

- (a) Explain the purpose of disclosure notes.
- (b) Draft the following disclosure notes
 - i) Non-current assets including tangible and intangible assets
 - ii) Provisions
 - iii) Events after the reporting period
 - iv) Inventory

4 Events after the reporting period

- (a) Define an event after the reporting period in accordance with International Financial Reporting Standards.
- (b) Classify events as adjusting or non-adjusting.
- (c) Distinguish between how adjusting and non-adjusting events are reported in the financial statements.

5 Statements of cash flows (excluding partnerships)

- (a) Differentiate between profit and cash flow.
- (b) Understand the need for management to control cash flow.
- (c) Recognise the benefits and drawbacks to users of the financial statements of a statement of cash flows.
- (d) Classify the effect of transactions on cash flows.
- (e) Calculate the figures needed for the statement of cash flows including:
 - (i) Cash flows from operating activities
 - (ii) Cash flows from investing activities
 - (iii) Cash flows from financing activities

- (f) Calculate the cash flow from operating activities using the indirect and direct method.
- (g) Prepare extracts from statements of cash flows from given information.
- (h) Identify the treatment of given transactions in a company's statement of cash flows.

6 Incomplete records

- (a) Understand and apply techniques used in incomplete record situations:
 - (i) Use of accounting equation
 - (ii) Use of ledger accounts to calculate missing figures
 - (iii) Use of cash and/or bank summaries
 - (iv) Use of profit percentages to calculate missing figures.

G Preparing simple consolidated financial statements

1 Subsidiaries

- (a) Define and describe the following terms in the context of group accounting:
 - (i) Parent
 - (ii) Subsidiary
 - (iii) Control
 - (iv) Consolidated or group financial statements
 - (v) Non-controlling interest
 - (vi) Trade/simple investment
- (b) Identify subsidiaries within a group structure
- (c) Describe the components of and prepare a consolidated statement of financial position or extracts thereof including:
 - (i) Fair value adjustments at acquisition on land and buildings (excluding depreciation adjustments)
 - (ii) Fair value of consideration transferred from cash and shares (excluding deferred and contingent consideration)
 - (iii) Elimination of inter-company trading balances (excluding cash and goods in transit)
 - (iv) Removal of unrealised profit arising from inter-company trading
 - (v) Acquisition of subsidiaries part-way through the financial year

- (d) Calculate goodwill (excluding impairment of goodwill) using the full goodwill method only as follows:
- | | |
|--|----------|
| Fair value of consideration | X |
| Fair value of non-controlling interest | X |
| Less fair value of net assets at acquisition | (X) |
| Goodwill at acquisition | <u>X</u> |
- (e) Describe the components of and prepare a consolidated statement of comprehensive income or extracts thereof including:
- (i) Elimination of inter-company trading balances (excluding cash and goods in transit)
 - (ii) Removal of unrealised profit arising on inter-company trading
 - (iii) Acquisition of subsidiaries part way through the financial year

2 Associates

- (a) Define and identify an associate and significant influence and identify the situations where significant influence or participating interest exists.
- (b) Describe the key features of a parent-associate relationship and be able to identify an associate within a group structure.
- (c) Describe the principle of equity accounting

H Interpretation of financial statements

1 Importance and purpose of analysis of financial statements

- (a) Describe how the interpretation and analysis of financial statements is used in a business environment.
- (b) Explain the purpose of interpretation of ratios.

2 Ratios

- (a) Calculate key accounting ratios:
 - (i) Profitability
 - (ii) Liquidity
 - (iii) Efficiency
 - (iv) Position
- (b) Explain the interrelationships between ratios

3 Analysis of financial statements

- (a) Calculate and interpret the relationship between the elements of the financial statements with regard to profitability, liquidity, efficient use of resources and financial position.

- (b) Draw valid conclusions from the information contained within the financial statements and present these to the appropriate user of the financial statements.

The context and purpose of financial reporting

Contents

- | | |
|---|--|
| 1 | The objectives of financial reporting |
| 2 | The needs of users and stakeholders |
| 3 | The main elements of financial reports |
| 4 | Capital and revenue items |
| 5 | The regulatory framework |
| 6 | Duties and responsibilities of those charged with governance |

The objectives of financial reporting

- The purpose of financial accounting
- Types of business entity
- Advantages and disadvantages of different types of business entity
- The nature, principles and scope of financial reporting

1 The objectives of financial reporting

1.1 The purpose of financial accounting

'Financial accounting' is a term that describes:

- maintaining a system of accounting records for business transactions and other items of a financial nature, and
- reporting the financial position and the financial performance of an entity in a set of 'financial statements'.

Note: The term '**entity**' is used to describe any type of organisation. 'Business entities' include companies, business partnerships and the businesses of 'sole traders'

Many business entities operate a system of recording their business transactions in accounting records. This system is called a **book-keeping system** or **ledger accounting system**. All large businesses (and many small ones) have a book-keeping system for recording the financial details of their business transactions on a regular basis.

The information that is recorded in the book-keeping system (ledger records) of an entity are also analysed and summarised periodically, typically each year, and the summarised information is presented in financial statements. Financial statements provide information about the financial position and performance of the entity.

1.2 Types of business entity

A business entity is a commercial organisation that aims to make a profit from its operations. There are three main types of business entity;

- a sole trader
- a business partnership
- a company (a limited liability company).

Sole trader

The business of a sole trader is owned and managed by one person. Any individual who sets up in business on his own, without creating a company, is a sole trader.

Sole trader businesses are usually small operations, but the owner might employ a number of employees who work for the business to earn a wage or salary, but do not have any share in the ownership of the business.

Important features of a sole trader business are as follows.

- The owner of the business is personally liable for the unpaid debts and other obligations of the business. For example if the business owes a supplier \$1,000 for goods it has purchased, but does not have the money to make the payment, the owner of the business can be made personally liable to make the payment out of his 'non-business' assets.
- The profits of a sole trader business are treated as income of the owner, for the purpose of calculating the amount of tax payable on income.

Partnership

A business partnership is an entity in which two or more individuals (partners) share the ownership of the business. Each partner contributes some funds ('capital') to set up the business. Like a sole trader, a partnership may have employees who work for the business, but have no share in the ownership.

Important features of a 'normal' partnership are as follows.

- The owners of the business are personally liable as individuals for the unpaid debts and other obligations of the business. For example if the partnership owes a supplier \$1,000 for goods it has purchased, but does not have the money to make the payment, the partners can be made personally liable to make the payment out of their 'non-business' assets.
- The profits of a partnership are shared between the partners in an agreed way, and each partner's share of the profits is treated as personal income, for the purpose of calculating the amount of tax payable on his or her income.

Company (limited liability company)

A company (a 'corporation' in the US) is a special form of business entity. Nearly all companies in business are limited liability companies with liability limited by shares.

- Ownership of the company is represented by ownership of shares. A company might issue any number of shares, depending largely on its size. A very small company might have just one share of \$1, whereas a large stock market company will have millions of shares in issue. If a company has issued 100 shares, ownership of 40 shares would represent 40% of the ownership of the company.
- Unlike a sole trader or a partnership, a company has the status of a 'legal person' in law. This means that a company can be the legal owner of business assets, and can sue or be sued in its own right in the law.
- A company is also taxed separately from its owners. Whereas the profits of a sole trader and business partners are all taxed as personal income of the business owners, the profits of a company are taxed as income of the company itself.
- A company has legal liability as a 'legal person'. This means that if the company owes a supplier \$1,000 for goods it has purchased, but does not have the money

to make the payment, the company alone is liable for the debt. The owners of the business – its ‘shareholders’ – cannot normally be made personally liable to make the payment. The liability of shareholders is limited to the amount of capital they have invested in the company. If the company’s shares are ‘fully paid’ (which is normal) shareholders have no further financial liability for any unpaid debts or other obligations of their company. This limited liability of the company’s shareholders for the unpaid debts of their company is a major reason why so many small businesses operate as companies.

Another feature of large companies is that they usually have a large number of shares in issue, and a large number of shareholders. In large companies, the main shareholders are not the managers of the business. The managers (executive directors of the company) and owners are different persons. This is sometimes referred to as the ‘separation of ownership from control’. This separation of management and ownership should be familiar to you from what you will have heard or read about large companies, but it applies to many smaller companies too. It is not found in the businesses of sole traders or partnerships, where the owners are usually also involved in management.

When the shareholders are not the managers of their company, it becomes essential that information about the position and performance of the company should be reported regularly by the management to the shareholders. This is the main purpose of financial reporting.

However, there might be a risk that the managers of a company would make false reports to shareholders about the financial position and performance of the company. To reduce this risk, the laws on financial reporting and auditing are generally much stricter for companies than for other types of business entity.

Financial reporting by sole traders, partnerships and companies

All business entities prepare some financial statements at the end of each accounting period, normally once each year.

- The financial statements of a sole trader are private and do not have to be disclosed, except to the tax authorities (and possibly also to a lending bank). These must be prepared according to accepted accounting principles and practice, but need not conform to all the requirements of accounting standards. Similarly, the financial statements of a business partnership are private and do not have to be disclosed.
- The financial statements of a company must be disclosed to all the shareholders of the company, and company law might require that the statements should also be filed with a government agency, where they can be accessed and read by any member of the general public. Companies whose shares are traded on a major stock market make their financial statements generally available to the public, often on the company’s web site.

1.3 Advantages and disadvantages of different types of business entity

The advantages and disadvantages of operating as each type of business entity may be summarised briefly as follows.

Business structure	Sole trader	Partnership	Company
Owned by...	One person	Several individuals working together	Shareholders
Liability for the unpaid debts and other obligations of the business	Personal liability of owner	Personal liability of partners	Limited
Management	Business managed by its owner	Business managed by its owners	Larger companies are managed by professional managers
Raising capital	Capital for the business is provided by its sole owner. Likely to be limited in amount.	Capital for the business is provided by its owners. Often limited in amount	Capital for the business is provided by its shareholders. Public companies can raise new capital from investors in the stock market. Most very large businesses are companies.
Financial accounting and auditing	Some financial accounts needed for tax purposes	Financial accounts needed for the benefit of the partners	Fairly strict regulation of financial reporting by companies. Also legal requirements for audits (except perhaps small companies).

1.4 The nature, principles and scope of financial reporting

As stated earlier, financial reporting is concerned with preparing a number of financial reports or 'financial statements' about the position and performance of the entity. This information is provided for the benefit of a number of different users.

Financial statements relate to a given period of time, known as the 'financial year', 'accounting period' or 'reporting period'. They are prepared from information held in the financial accounting records (the 'books' or 'ledgers'), although some adjustments and additions are required to complete the financial statements, especially for companies.

Financial statements should be prepared in accordance with accepted rules and principles.

- Some principles have been established by practice, although a framework of principles and concepts has been issued by the International Accounting Standards Board (IASB).

- Some rules and guidelines are provided by accounting standards. Some countries have their own national accounting standards, but many have adopted the international accounting standards of the IASB.
- Each country has its own laws about aspects of the preparation and content of financial statements, especially for companies.

Accounting practice is therefore a mixture of established practice, and the requirements of accounting standards and national laws.

Although the requirements for preparing financial statements differ between types of business entity and different countries, there is a general system of book-keeping or ledger accounting used by most business entities in most countries and well-established concepts and principles for financial reporting.

Scope and objective of financial reporting

The rules on financial reporting, including the requirements of international accounting standards, are concerned with the preparation of financial statements for **'external' users**.

In many business entities, detailed financial reports are prepared for the benefit of **management**. Providing financial information for the benefit of managers is known as management accounting, and this is not subject to any regulatory control. Managers can use the information in financial statements if they wish to do so, but they ought to be able to obtain better information about the operations of their business - and more regularly. So financial reporting is not primarily for the benefit of management.

The IASB has issued a **Framework for the Preparation and Presentation of Financial Statements**, which states that the objective of financial statements is to:

- provide information about the financial position, performance and changes in financial position of an entity
- that is useful to a wide range of users in making economic decisions.

So who are these users?

The needs of users

- Information for economic decisions
- Types of business entity
- Advantages and disadvantages of different types of business entity
- The nature, principles and scope of financial reporting

2 The needs of users

2.1 Information for economic decisions

The IASB states that financial statements are produced to enable users to make economic decisions on the basis of the information that the statements provide. Information – including financial information – has no value unless it is used.

Users of financial information usually have an interest in some aspect of what the entity does or might do in the future. Any person or group of persons with an interest of any kind in a business entity is sometimes referred to as a '**stakeholder**' – because they have some stake in what the entity does. Many users of financial statements are therefore also stakeholders.

2.2 Users of financial statements

The International Accounting Standards Board (IASB) has published a document that sets out the concepts that underlie the preparation and presentation of financial statements for users. This document is called the **IASB Framework for the preparation and presentation of financial statements**. (IASB stands for the International Accounting Standards Board, which reports to the IASC Foundation.)

The IASB Framework provides a list of users of financial statements, and an indication of what their information needs might be.

Investors

Investors in a business entity are the providers of risk capital. Unless they are managers as well as owners, they invest in order to obtain a financial return on their investment. They need information that will help them to make investment decisions. In the case of shareholders in a company, these decisions will often involve whether to buy, hold or sell shares in the company. Their decision might be based on an analysis of the past financial performance of the company and its financial position, and trying to predict from the past what might happen to the company in the future. Financial statements also give some indication of the ability of a company to pay dividends to its shareholders out of profits.

Employees

Employees need information about the financial stability and profitability of their employer. An assessment of profitability can help employees to reach a view on the ability of the employer to pay higher wages, or provide more job opportunities in the future.

Lenders

Lenders, such as banks, are interested in financial information about businesses that borrow from them. Financial statements can help lenders to assess the continuing ability of the borrower to pay interest, and its ability to repay the loan principal at maturity.

Suppliers and other trade creditors

Financial information about an entity is also useful for suppliers who provide goods on credit to a business entity, and other 'trade creditors' who are owed money by the entity as a result of debts incurred in its business operations (such as money owed for rent or electricity or telephone charges). They can use the financial statements to assess how much credit they might safely allow to the entity.

Customers

Customers might be interested in the financial strength of an entity, especially if they rely on that entity for the long-term supply of key goods or services.

Government

The government and government agencies are interested in the financial statements of business entities. They might use this information for the purpose of business regulation or deciding taxation policies.

The public

In some cases, members of the general public might have an interest in the financial statements of a company. The IASB Framework comments: 'For example, entities may make a substantial contribution to the local economy in many ways including the number of people they employ and their patronage of local suppliers.'

Managers

Managers are not included in this list of users by the IASB Framework, because management should have access to all the financial information they need, and in much more detail than financial statements provide. However, management is responsible for producing the financial statements and might be interested in the information they contain.

The International Accounting Standards Board (IASB) states in its Framework that investors are the most significant of the user groups in its list.

- All the information needs of user groups cannot be met by financial statements.

- However there are needs for financial information that are common to all users.
- Investors are providers of risk capital to the entity; therefore information that meets their needs should meet most of the needs of other users, to the extent that financial statements can meet these information needs at all.
- In producing international accounting standards, the IASB has therefore given most consideration to the information needs of investors.

The main elements of financial reports

- Financial statements
- The statement of financial position
- Assets
- Liabilities
- Equity
- Format of a simple statement of financial position
- The income statement: income and expenses
- Format of a simple income statement
- Relationship between the income statement and the statement of financial position

3 The main elements of financial reports

3.1 Financial statements

Financial statements present information about:

- the financial position of an entity
- its financial performance during an accounting period ('reporting period')
- its cash flows and
- changes in its financial position during the period.

They also show the results of how management have used and looked after the resources of the business ('management's stewardship of the resources entrusted to it' (IAS 1 **Presentation of Financial Statements**)).

To do this, the financial statements provide information about an entity's:

- assets
- liabilities
- equity
- income and expenses, including gains and losses
- contributions by the owners of the entity and distributions by the entity to its owners, in their capacity as owners (e.g. contributions of new capital by the owners, and payments of drawings or dividends to the owners)
- cash flows.

Information about the financial position of an entity consists of information about its **assets, liabilities and equity**. This information is presented in a **statement of financial position**. (In the past this has been called the **balance sheet**, and you will probably come across this term during your studies.)

Information about the financial performance of an entity consists of information about **income and expenses** – and profit or loss – and also **certain other gains or losses** during the period that are not regarded as income or expense, or part of profit or loss. From 1 January 2009, entities should report this information in either of two ways:

- in a **statement of comprehensive income**, which reports both ‘profit and loss’ and also ‘other comprehensive income’, or
- in two statements, an **income statement followed by a statement of comprehensive income**.

For the purpose of your examination, the income statement is the more important of these two statements.

Information about transactions by the entity with its owners in their capacity as owners (for example **new share issues** or **dividend payments** by a company) are reported in another financial statement called the **statement of changes in equity** or **SOCIE**.

Information about **cash flows** is reported in a **statement of cash flows**.

Additional information is provided in **notes to the financial statements**. These are a mixture of narrative notes and additional numerical information (sometimes in a table of figures). The financial statements of a large company will include a large number of notes, providing a wide range of additional information not contained in the main financial statements themselves.

The statement of financial position, income statement, statement of comprehensive income and statement of cash flows will be described in more detail in later chapters. The remainder of this section will explain the contents and basic structure of the statement of financial position and the income statement.

3.2 The statement of financial position

A statement of financial position (formerly called a balance sheet) reports the financial position of an entity as at a particular date, usually the end of a financial year. The financial position of an entity is shown by its assets, liabilities and equity (owners’ capital).

3.3 Assets

An asset is defined by the IASB Framework as ‘a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.’ A resource will provide ‘future economic benefits’ if it will contribute directly or indirectly to the inflow of cash to the business.

This is a fairly complex definition. It might therefore help to think of an asset as something that an entity owns or something that it is owed. (This is not a strictly accurate definition, but it can be helpful.)

In the balance sheet, assets are categorised into two main types:

- **Current assets:** assets that are expected to provide economic benefit in the short term. Examples of assets that are owned are **inventory** and **cash**. An example of assets that are owed is money owed by customers who have purchased goods or services on credit. These assets are called '**receivables**' or '**trade receivables**' (to identify the fact that the debt has arisen in the course of business trading, and the money is therefore owed by customers).
- **Non-current assets:** assets that have a long useful life and are expected to provide future economic benefits for the entity over a period of several years. Examples are property, plant and equipment. A machine, for example, might be expected to have a useful life of five years. If so, it is classified as a non-current asset. Non-current assets are sometimes referred to as 'fixed assets'.

3.4 Liabilities

A liability is defined by the IASB Framework as a 'present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.'

This too is a fairly complex definition. When you are learning about liabilities for the first time, it helps to think of a liability as something that the entity owes. (This is not a strictly accurate definition, but it can be helpful.)

Examples of liabilities are amounts owed to suppliers for goods or services purchased ('**trade payables**'), amounts owed to a bank (bank loans and a bank overdraft) and taxation owed to the government. It is usual to categorise liabilities in the statement of financial position into:

- **Current liabilities:** These are obligations payable within 12 months
- **Non-current liabilities:** These are amounts not payable within the next 12 months, for example a long-term loan from a bank.

3.5 Equity

Equity is the residual interest in the business that belongs to its owner or owners after the liabilities have been deducted from the assets.

$$\text{Equity} = \text{Assets} - \text{Liabilities}$$

Equity is therefore sometimes referred to as the 'net assets' of the business, in other words assets minus liabilities.

Equity might also be referred to as 'owners' capital' because it represents, in accounting terms, the amount of capital invested in the business by the owners. However, equity consists not only of capital put into the business by its owners, but also profits that the business has made and retained or reinvested within the business.

3.6 Format of a simple statement of financial position

A simple statement of financial position in a 'vertical' format is divided into two parts:

- The top half of the statement shows the assets of the business, with non-current assets first, and current assets below the non-current assets.
- The lower half of the statement shows the equity, followed by the liabilities. The liabilities are shown with non-current (long-term) liabilities first, and then current liabilities.

The value of total assets in the top part of the statement of financial position must always equal the total of equity plus liabilities.



Example: statement of financial position

Entity ABC

Statement of financial position as at [date]

Assets	\$	\$
Non-current assets:		
Land and buildings		400,000
Plant and equipment		100,000
Motor vehicles		80,000
		<u>580,000</u>
Current assets:		
Inventory	20,000	
Receivables	30,000	
Cash	<u>5,000</u>	
		<u>55,000</u>
Total assets		<u>635,000</u>
Equity and liabilities		
Equity:		
Owner's capital		440,000
Non-current liabilities:		
Bank loan		170,000
Current liabilities:		
Bank overdraft	10,000	
Trade payables	<u>15,000</u>	
		<u>25,000</u>
Total equity and liabilities		<u>635,000</u>

3.7 The income statement: income and expenses

The income statement reports the financial performance of an entity during a period of time, such as the financial year. The elements in an income statement are income and expenses. The difference between income and expenses is profit or loss.

An income statement might be presented as a separate financial statement. Alternatively, the same information might be included as the first part of a statement of comprehensive income. The IASB therefore uses the term 'profit or loss' to refer to items of income or expense that will be reported in either the income statement or in the 'profit and loss' part of a statement of comprehensive income.

For convenience, this text will often refer to 'income statement' as a way of indicating either the income statement or the profit and loss section of a statement of comprehensive income.

Income

Income consists of:

- revenue from the sale of goods or services
- other items of income such as interest received from investments
- gains from disposing of non-current assets for more than their 'carrying value' or 'net book value'. (This is their value in the statement of financial position). For example, if a machine is sold for \$15,000 when its value in the statement of financial position is \$10,000, there is a gain on disposal of \$5,000.

The term '**revenue**' means income earned in the course of normal business operations. In an income statement, revenue and 'other income' are reported as separate items.

Expenses

Expenses consist of:

- expenses arising in the ordinary course of activities, including the cost of sales, wages and salaries, the cost of the depletion of non-current assets, interest payable on loans and so on
- losses arising from disasters such as fire and flood, and also losses from disposing of non-current assets for less than their carrying value in the statement of financial position.

3.8 Format of a simple income statement

An income statement is usually presented in a vertical format. The order of presentation is usually as follows:

- sales or revenue
- the cost of sales
- gross profit, which is sales minus the cost of sales
- other income, such as interest income and gains on the disposal of non-current assets
- other expenses, which might be itemised in some detail. (There is no rule about the sequence of expenses in the list, but it is usual to show expenses relating to administration, followed by expenses relating to selling and distribution, and finally expenses relating to financial matters, such as interest charges, bad debts and audit fees.)

- net profit, which is gross profit plus other income and minus other expenses.

The income statement of a company is slightly different – for example, it includes the tax charge on the company's profits.



Example: income statement

Entity ABC

Income statement for the year ended [date]

	\$	\$
Revenue		800,000
Cost of sales		<u>500,000</u>
Gross profit		300,000
Other income:		
Gain on disposal of non-current asset		<u>10,000</u>
		310,000
Expenses		
Employees' salaries	120,000	
Depreciation	10,000	
Rental costs	30,000	
Telephone charges	15,000	
Advertising costs	30,000	
Selling costs	40,000	
General expenses	20,000	
Interest charges	3,000	
Bad debts	<u>2,000</u>	
		<u>270,000</u>
Net profit		<u>40,000</u>

Gross profit and net profit

It is usual to show both the gross profit and the net profit in an income statement.

- Gross profit is the sales revenue minus the cost of sales in the period, and
- Net profit (or loss) is the profit after taking into account all other income and all other expenses for the period.

The expenses included in 'cost of sales' differ according to the activities or type of industry in which the entity operates. For example:

- in a retailing business, the cost of sales might be just the purchase cost of the goods that have been sold
- in a manufacturing business, the cost of sales might be the cost of producing the goods sold during the period.

3.9 Relationship between the income statement and the statement of financial position

The income statement and the statement of financial position are separate statements but they are also related to each other.

The income statement ends with a figure for the net profit for the period. Profit belongs to the owner (or owners) of the business. It is therefore an addition to the owner's capital.

Profit for the year is therefore added to owners' capital in the statement of financial position at the end of the year.

This will be explained in more detail later.

Capital and revenue items

- The difference between capital and revenue items
- Capital and revenue expenditure
- Revenue income and capital receipts

4 Capital and revenue items

4.1 The difference between capital and revenue items

A business entity normally operates over many years, but prepares financial statements annually (at the end of each financial year).

- It spends money for both the long term, by investing in machinery, equipment and other assets. It also spends money on day-to-day expenses, such as paying for supplies and services, and paying wages or salaries to employees.
- It receives income from its business operations. It might also receive income from other sources, such as a new bank loan, or new capital invested by its owner.

A distinction is made between 'capital' and revenue' items:

- Items of a long-term nature, such as property, plant and equipment used to carry out the operating activities of the business, are 'capital items'.
- Items of a short-term nature, particularly items that are used or occur in the normal cycle of business operations, are 'revenue items'.

As a rough guide (but which is not strictly accurate):

- capital items will be reported in the statement of financial position, because they are of a long-term nature
- revenue items are at some stage reported as income or expenses in the income statement or statement of comprehensive income.

4.2 Capital and revenue expenditure

Capital expenditure is expenditure to acquire a long-term asset for the business (a capital asset), such as property, plant and machinery, office equipment and motor vehicles. A 'capital asset' is a '**non-current asset**'.

The IASB defines '**capitalisation**' as recognising a cost as an asset or part of the cost of an asset. So when an item of cost is '**capitalised**' it is treated as an asset rather than an expense.

Revenue expenditure is expenditure on day-to-day operating expenses. Revenue expenditure is reported as expenditure in the income statement. For example, suppose that a business entity borrows \$100,000 from a bank for five years and pays

interest of \$8,000 on the loan for the first year. The loan is a non-current liability (and part of the long-term 'capital' of the business) and the interest is an expense.

4.3 Revenue income and capital receipts

Revenue income is income arising from the business operations of an entity or from its investments (such as interest received on cash savings). This is reported in the income statement or within profit and loss in the statement of comprehensive income.

Capital receipts are receipts of 'long term' income, such as money from a bank loan, or new money invested by the business owners (which is called 'capital'). Capital receipts affect the financial position of an entity, but not its financial performance. Capital receipts are therefore excluded from the income statement or statement of comprehensive income.

(*Note:* Income might be received from the sale of a non-current asset, such as an item of machinery that is no longer needed. This is neither capital nor revenue income. However, the gain or loss on disposing of non-current assets is included in the income statement.)

The regulatory system for financial accounting

- Accounting regulation and international accounting standards
- IASC Foundation and IASB
- The role of International Financial Reporting Standards

5 The regulatory system for financial accounting

5.1 Accounting regulation and international accounting standards

Financial reporting is regulated and controlled. Regulations should help to ensure that information reported in financial statements has the required qualities and content.

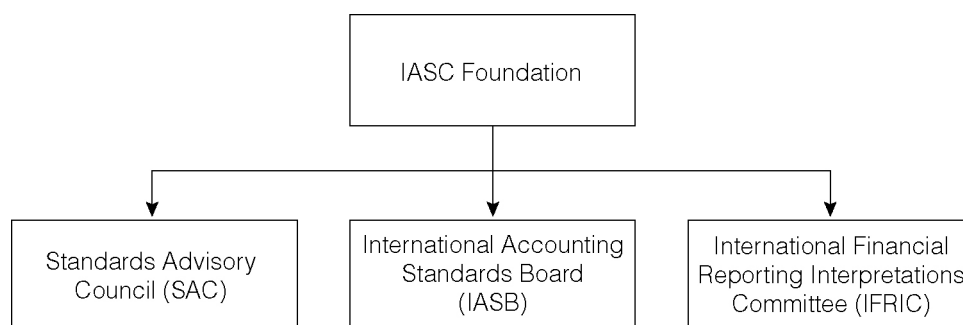
Countries have their own national laws and regulations about financial accounting. In addition, the accountancy profession has developed a large number of regulations and codes of practice that professional accountants are required to use when preparing financial statements. These regulations are **accounting standards**.

Many countries and companies whose shares are traded on the world's stock markets have adopted International Financial Reporting Standards. These are issued by the International Accounting Standards Board (IASB). Accounting standards are applied to companies and corporations, but are not necessarily used to prepare the financial statements of non-corporate businesses, such as sole traders and partnerships.

5.2 IASC Foundation and IASB

The body with overall responsibility for international accounting is the International Accounting Standards Committee Foundation or IASC Foundation. The members of the IASC Foundation have no direct involvement in setting accounting standards, but they have oversight of three bodies that do:

- The International Accounting Standards Board (IASB)
- The Standards Advisory Council (SAC)
- The International Financial Reporting Interpretations Committee (IFRIC).



The IASB

The IASB develops new international accounting standards. These are called International Accounting Standards (IASs) or International Financial Reporting Standards (IFRSs). An IAS and an IFRS have equal status: both are international accounting standards.

The 'new' name IFRS was introduced when the current IASB structure was established.

- Previously, all standards were issued by a body called the International Accounting Standards Committee or IASC. The IASC issued International Accounting Standards or IASs.
- In 2001, the IASB took over from the IASC as the body responsible for issuing international accounting standards. Standards issued by the IASB are IFRSs.
- The existing IASs were adopted by the IASB and many have since been amended. All new international accounting standards will now be an IFRS, but there will continue to be IASs as well as IFRSs for the foreseeable future.

Each IAS or IFRS has a unique identifying number, such as IAS 7 or IFRS 1.

The Standards Advisory Council

The SAC consists of representatives from different countries. It gives advice to the IASB on the development of new IFRSs. The IASB consults with the SAC, to obtain the views and opinions of its members, when new accounting standards or amendments to existing standards are being considered.

IFRIC

Sometimes, when an accounting standard is issued, there is some uncertainty about what the regulations actually mean, or how the standard should be applied to particular transactions. When important questions about interpretation are asked, the matter is referred to IFRIC.

When uncertainty arises with the meaning of an accounting standard, IFRIC interprets the rules in an IAS or IFRS, and publishes its official interpretation.

5.3 The role of International Financial Reporting Standards

International Financial Reporting Standards provide rules and guidelines for the preparation and presentation of financial statements, but they do not cover every aspect of accounting and every type of business transaction. Where there is no relevant accounting standard for particular aspects of financial reporting, preparers of financial statements are expected to apply the general principles and concepts of accounting that are set out in the IASB Framework.

A role of IFRSs is to encourage business entities in all countries to apply similar principles, concepts and accounting methods, so that the financial statements of all companies can be compared. Global accounting standards will help with the development of international investment, because investors should be able to read

and understand the financial statements of companies in any country, and make comparisons.

The IASC Foundation and IASB have no power to enforce the International Financial Reporting Standards and in this sense IFRSs are 'voluntary'. The power to enforce the use of international standards belongs to the governments of individual countries. Some countries have adopted IFRSs and made them compulsory for some types of business entity. For example, in the European Union, stock market companies are required to use IFRSs in preparing their financial statements.

6 Duties and responsibilities of those charged with governance

6.1 Governance, and the responsibilities of those charged with governance in the context of preparation of financial statements

Corporate governance has been defined (in the Cadbury Report, 1992) as follows: 'Corporate governance is the system by which companies are directed and controlled.'

Governance should not be confused with management.

- Management is concerned with running the business operations of a company.
- Governance is about giving a lead to the company and monitoring and controlling management decisions, so as to ensure that the company achieves its intended purpose and aims.

Corporate governance is concerned with matters such as:

- In whose interests is a company governed?
- Who has the power to make decisions for a company?
- For what aims or purposes are those powers used?
- In what manner are those powers used?
- Who else might influence the governance of a company?
- Are the governors of a company held accountable for the way in which they use their powers?
- How are risks managed?

In particular, this syllabus addresses the role of corporate governance specifically in the context of the preparation of financial statements. In this context, we can say that the modern codes of corporate governance require that the Board of Directors should be properly accountable to its shareholders (through the published financial statements), and should be open and transparent with investors generally.

To make a board properly accountable, high standards of financial reporting (and narrative reporting) and external auditing must be upheld. The major 'scandals' of corporate governance in the past have been characterised by misleading financial

information in the company's accounts – in the UK, for example, Maxwell Communications Corporation and Polly Peck International, more recently in Enron and WorldCom in the US and Parmalat in Italy. Enron filed for bankruptcy in 2001 after 'adjusting' its accounts. WorldCom, which collapsed in 2002 admitted to fraud in its accounting and its chief executive officer was subsequently convicted and jailed.

6.2 Duties and responsibilities of directors and others covering the preparation of the financial statements

Compliance with accounting standards is important if the financial statements are to fairly represent the activities of the entity. If accounting standards are not complied with, then it may be that the financial statements are misleading. Investors then stand to lose money if they have made decisions based on misleading financial information.

It is also important that employers have a code of ethics so that employees in a situation where they feel they may have to act unethically have somewhere to go for help. Some companies have codes of business ethics so that guidance is there for employees to know how they are expected to act and ask for assistance in an ethical dilemma.

Accountants who are responsible for the preparation of financial information must ensure that the information they prepare is technically correct, reports the substance of the transaction and is adequately disclosed. The danger is that they are put under influence from senior managers to present figures that inflate profit or assets or understate liabilities. This puts the accountant in a difficult position. On one hand, they wish to prepare proper information and on the other hand, there is a possibility they might lose their job if they do not comply with their managers wishes.

In this case, ethics starts with the individual preparing the information. They have a difficult decision to make; whether to keep quiet or take the matter further. If they keep quiet, they will certainly be aware that they are not complying with the ethics of the accounting body they belong to. If they speak out, they may be bullied at work into changing the information or sacked. Many accounting bodies have ethical 'help lines' where an individual can ring for advice.

A well publicised example of acting about unethical practices occurred in Enron where Sherron Watkins wrote to the Enron chairman and the company's auditors to alert them of unethical practices in the business. Her action caused a chain of events that would see the company go bankrupt and the auditors cease business. Enron were hiding losses and liabilities in partnerships that were not consolidated into the group accounts. The group had been reporting profits rather than losses for several years. The auditors initially ignored the practices; which was to prove to be a fatal error as once the public found out about Andersen's involvement, the firm lost all of its clients.

As a result of corporate accounting standards in the US, the Sarbanes-Oxley Act was introduced in 2002. It aimed to take a legislative approach to corporate

accountability. The CEO and CFO are personally responsible for the accuracy of their company's financial information. All companies listed on US stock exchanges must provide a signed certificate to the Securities and Exchange Commission (SEC) confirming the accuracy of their financial accounts.

Practice multiple choice questions

- 1** A trade receivable is an example of:
- A** an asset
 - B** a liability
 - C** income
- (1 mark)**
- 2** A loan of \$30,000 from a bank, repayable in three years' time, is:
- A** a current liability
 - B** a non-current liability
 - C** a current asset
 - D** a non-current asset.
- (1 mark)**
- 3** International accounting standards are written primarily with regard to the information needs of which type of users?
- A** managers
 - B** employees
 - C** the government and government agencies
 - D** investors.
- (2 marks)**
- 4** Some of the content of the financial statements of companies might be specified by national company law.
- Is this statement TRUE or FALSE?
- (1 mark)**
- 5** Which of the following items are items of capital expenditure?
- (1) Computer repairs
 - (2) Purchase of a property
 - (3) Short term hire of machinery
- A** (1) and (2) only
 - B** (1) and (3) only
 - C** (2) only
 - D** (3) only.
- 6** Which of the following items are items of capital expenditure?
- (1) The cost of re-decorating offices
 - (2) Purchase of additional machinery

(3) Construction of an extension to the Head Office building

A (1) and (2) only

B (1) and (3) only

C (2) and (3)

D (3) only

Qualitative characteristics of financial information

Contents

- | | |
|---|---|
| 1 | Qualities of financial information |
| 2 | Accounting concepts: underlying assumptions |

Qualities of financial information

- Understandability
- Relevance
- Reliability
- Comparability
- Constraints on relevant and reliable information
- True and fair view / faithful representation

1 Qualities of financial information

The IASB Framework also sets out the qualities that the information in financial statements should have in order to make the financial statements useful to users. There are four main qualitative characteristics:

- understandability
- relevance
- reliability
- comparability.

1.1 Understandability

The financial information should be readily understandable by its users. This might seem obvious: financial information is of no use unless its users can understand it. There is a potential problem that, for an 'ordinary user', financial statements might be too technical or complex.

However, the IASB Framework states that it should be assumed that users have a reasonable knowledge of business and economic activities and accounting. Complex items must not be excluded from the financial statements for the reason that the users of the statements will not understand them.

1.2 Relevance

Financial information should be relevant to the economic decision-making needs of users. Financial statements can help users to evaluate past, present or future events, in order to:

- predict the future financial position and performance of the organisation, or
- confirm or correct the evaluations and forecasts they have made in the past.

The relevance of information is affected by its **materiality**.

- Information is of little or no relevance if it is insignificant (immaterial).
- However, information is relevant if it is material.

Deciding what is material and what is not material can be a matter of judgement.

1.3 Reliability

Financial information must also be reliable. Users must be able to have trust in it, so that they can use the information to make their economic decisions with confidence that it is not misleading or too inaccurate.

It might seem more appropriate to state that financial information ought to be accurate, rather than reliable. However, information can be reliable provided that it is sufficiently reliable for its purpose, and 100% accuracy is not necessary.

Information is reliable if it is free from material error and bias. In order to be reliable, information must have the following qualities:

- Faithful representation
- Substance over form
- Neutrality
- Prudence
- Completeness.

Faithful representation

The information must represent faithfully the transactions or other events that it is supposed to represent. For example a statement of financial position should faithfully represent the transactions and other events that have resulted in assets, liabilities and equity.

There is a risk that financial information might not faithfully represent transactions and events, but this is not due to bias but rather to the difficulties that often exist in obtaining a reliable measurement of an item.

Substance over form

The information should represent the substance or economic reality of the financial transactions, even if the economic reality is not consistent with the legal position. An example of 'substance over form' arises when an entity effectively controls the use of an item of equipment even though it is not the legal owner. An example is a long-term lease in which an entity pays lease rentals for an item over most of its economic life, controlling the use of the item without becoming the legal owner. The concept of 'substance over form' is that an item should be accounted for as an asset in such a situation, even though the entity is not its legal owner.

Neutrality

The information must be free from bias.

Prudence

Financial statements must sometimes recognise the uncertainty in business transactions. For example, if a business is owed \$1,000,000 by a number of its customers, there will be some uncertainty as to whether all the money will actually be collected. Prudence involves allowing for some caution in preparing financial statements, by making reasonable and sensible allowances in order to avoid

overstating assets or income and to avoid understating expenses or liabilities. In the example of the \$1,000,000 of receivables, it might be prudent to recognise that some of the receivables, say, \$50,000, will not be collected and will become 'bad debts' ('irrecoverable debts').

However, the concept of prudence does not allow an entity to create 'hidden reserves', by undervaluing an asset or over-stating an expense or a provision. For example, suppose that a company knows from experience that about 2% of its receivables will become bad debts. It would be prudent to make an allowance for bad debts equal to 2% of receivables, but it would be inappropriate to make an excessive allowance, say 10% of receivables.

Completeness

To be reliable, information should be complete, subject to materiality and cost. (There is no need to include information if it is not material, and greater accuracy is not required if the cost of obtaining the extra information is more than the benefits that the information will provide to its users.)

1.4 Comparability

Financial information should enable the users of financial statements to make comparisons:

- with the financial statements of other business entities, and
- with the entity's own financial statements for previous years.

Proper comparisons are only possible if the information that is being compared has been prepared on the same basis, in a consistent way.

An important implication of the need for comparability is that an entity should disclose the accounting policies that it has used to prepare the financial information.

The IASB Framework comments that compliance with International Financial Reporting Standards helps to achieve comparability.

Since users of financial statements often want to compare the financial performance and position of an entity over time, it is important that financial statements should show corresponding figures for the previous financial year as well as for the current year (the year just ended).

1.5 Constraints on relevant and reliable information

Some of the desirable characteristics of financial information are inconsistent with each other. For example, it is not possible for information to be completely neutral if there is some element of prudence in the figures (such as an allowance for bad debts, which is an assessment based on judgement).

Inconsistencies also exist between the requirements for relevance and reliability. The IASB Framework makes the following additional points about the quality of information in financial statements:

- **Timeliness.** Sometimes it is necessary to sacrifice some reliability in order to avoid undue delay in providing the information, by producing the financial statements within a reasonable time after the end of the financial period to which the statements relate. If information is made available too late, it loses its relevance. A balance must therefore be made between timeliness and relevance.
- **Cost and benefit.** The benefits obtained from providing accounting information should not exceed the cost of providing it. Sometimes, extra reliability is not worth the cost of obtaining it. A balance must therefore be made between the cost and the benefit of the information.

1.6 True and fair view/faithful representation

Financial statements should give a 'true and fair view' of the financial position, financial performance and changes in financial position of an entity. Another way of saying this is that financial statements should provide a 'faithful presentation' of the financial position, financial performance and changes in financial position of an entity.

The IASB Framework states that although it does not deal directly with the concept of true and fair view or faithful representation, financial statements will normally result in a true and fair view (faithful representation) if:

- the financial information has the main qualitative characteristics identified by the Framework, and
- the financial statements are prepared in accordance with the international accounting standards.

Accounting concepts: underlying assumptions

- The business entity concept
- The money measurement concept
- The realisation concept
- Underlying assumptions
- Accruals basis (matching concept)
- Going concern assumption

2 Accounting concepts: underlying assumptions

Financial statements are prepared using a number of underlying assumptions and concepts.

2.1 The business entity concept

A concept used in financial reporting is that a business entity is an entity that is separate from its owners. In other words, the business entity and its owners are different.

For example, suppose that John Smith sets up a sole trader business as a builder, and he calls the business 'J Smith, Builder'. For the purpose of financial reporting, the business (J Smith, Builder) and John Smith, the owner of the business, are different and separate from each other.

The owner of the business is someone who has contributed capital to the business, and who owns the profits that have been made and retained and re-invested in the business. The equity capital of a business can be thought of as an amount that the business entity owes to its owners.

- Financial statements must not mix the assets and liabilities of the business with the personal assets and liabilities of the individual owners. For example, the money in a bank account for a business is an asset of the business, but money in the personal bank account of the business owner is money belonging to the owner.
- If an owner takes money from the business, for example by taking out some of the profits in cash, the capital of the business is reduced. The business pays out its cash to the owner. (The owner is not taking his personal cash, but the cash of the business.)
- When an owner invests new money in a business, there is an increase in the equity capital.

The separate entity concept has legal 'reality' in the case of companies. A company by law is a legal person, separate from its owners (the shareholders). However, the separate entity concept also applies to other businesses, such as sole trader businesses and partnerships.

A statement of financial position presents the assets of the business entity and also its equity and liabilities. Equity represents the amount the entity 'owes' to its owners, and liabilities are the amounts it owes to others. The total assets that the entity 'owns' are equal to the total amount of equity plus liabilities that it 'owes'.

2.2 The money measurement concept

The money measurement concept in financial reporting is that an item should not be 'recognised' and included in the financial statements unless it has a money value that can be measured reliably and objectively.

For example land can be included in the financial statements because its value can be measured objectively, either at its original cost or at its current market value (which can be determined objectively from a professional valuation).

On the other hand, the value of a skilled and experienced employee is not included in a statement of financial position, partly because the cost or value of an employee to the business cannot be measured objectively.

2.3 The realisation concept

The realisation concept is that a transaction should not be 'recognised' and included in the financial statements until it has actually happened and has 'been realised'. For example, it is inappropriate to include the profit on a transaction in the financial statements if the transaction has not happened yet, even if it will happen in the future.

As a general rule, revenue from sales is not 'recognised' until the sale transaction has been realised by the delivery of the goods or service to the customer. (The rules on revenue recognition are a bit more complex, but this explanation is sufficient for the purpose of the F3 examination.)

2.4 Underlying assumptions

The IASB Framework identifies two underlying assumptions that are used in the preparation of the statement of financial position and the income statement or statement of comprehensive income. These are:

- the accruals basis, and
- the going concern assumption.

2.5 Accruals basis (matching concept)

The accruals basis of preparing financial statements, which is also called the 'matching concept', is based on the following assumptions.

- The cost of sales in the income statement (or within profit and loss in the statement of comprehensive income) must be matched with the sales. Sales income and 'matching' expenses must be reported in the same financial period.
- Other expenses should be charged in the period to which they relate, not the period in which they are paid for.

- Income, such as sales, should be reported in the period when the income arises. This might not be the same as the period when the cash is received.

With the accruals basis, financial transactions and other events are recognised in the financial statements when they occur, and not when the cash relating to the transaction is received or paid.

Accruals basis and the income statement:	\$
Sales income = income arising in the financial period	X
Cost of sales = costs matched with sales arising in the period	(X)
Gross profit	X
Other costs = charged in the period (financial year) to which they relate	(X)
Net profit	X



Example 1: accruals basis

A company prepares its financial statements to the 30 June each year.

It sells goods for \$50,000 to a customer on 6 June Year 2, but does not receive cash payment from the customer until 15 August Year 2.

Applying the accruals concept, the sale is recognised as income in the year to 30 June Year 2, even though the cash is not received until after the end of this financial year.



Example 2: accruals basis

A company starts in business on 1 September Year 1. It acquires an office for which it pays one year's rent in advance, to 30 August Year 2. The cost of the annual rental is \$120,000. The company prepares its financial statements for a financial period ending on 31 December each year.

Applying the accruals concept, the expense for office rental cost in the period to 31 December Year 1 is the cost of just four months' rent. The expense is therefore \$40,000 ($\$120,000 \times 4/12$) in Year 1, and there has been a prepayment for \$80,000 that relates to the next financial period, the year to 31 December Year 2.

Definitions

Prepayment. A prepayment is an amount of money paid in advance for which the benefits have not yet been received. A prepayment in Year 1 of some expenses relating to Year 2 should not be charged as an expense in Year 1, but should be treated as an expense in Year 2.

Accrued expense or accrual. An accrual or accrued expense is an amount of money that an entity owes but that has not yet been paid. For example, a company might rent office space at a cost of \$600,000 per year from 1 July Year 1, with the rental payable in 12 months in arrears on 30 June. If the company prepares its financial statements to 31 December each year, it will not have made any payment for rent by

31 December Year 1, but there will be accrued rental costs for six months (\$300,000) which must be included as an expense in profit and loss for Year 1.

Deferred income. Deferred income is revenue that an entity receives in advance, that relates to goods or services that will be provided in a future accounting period. Revenue should not be 'recognised' until the goods or services have been delivered. For example, a deposit of \$800 received from a customer for goods that have not yet been delivered should not be recognised in revenue until the goods are eventually delivered.



Exercise 1

A company prepares its financial statements to 31 December each year. It hires an item of equipment for the period 1 November Year 1 to 30 April Year 2, at a cost of \$30,000. However, it does not have to pay the hire charge until the end of the hire period, at the end of April Year 2.

What expense for equipment hire, if any, should be included in the income statement for the year to 31 December Year 1?

2.6 Going concern basis

The going concern basis of accounting is that all the items of value owned by a business, such as inventory and property, plant and equipment, should be valued on the assumption that the business will continue in operation for the foreseeable future. The business will not close down or be forced to close down and sell off all its items (assets). This assumption affects the value of assets and liabilities of an entity, as reported in the financial statements.

For example, if a business entity is not a going concern, and is about to be closed down and liquidated, the value of its assets would be their estimated value in the liquidation process. Assets are valued differently on a going concern basis.

Practice multiple choice questions

- 1 Which one of the following is NOT an aspect of the reliability of financial information?
 - A fair presentation
 - B substance over form
 - C neutrality
 - D completeness

(2 marks)

- 2 If there is undue delay in reporting financial information, the information might lose its:
 - A relevance
 - B reliability

(1 mark)

3 Which of the following statements are correct?

- 1 Prudence requires that expenses should never be over-stated in the financial statements.
- 2 The going concern assumption is that the business entity will continue in operation for the foreseeable future.
- 3 Complex items should not be excluded from the financial statements on the grounds that they would not be understandable for many users.

- A** (1) and (2) only are correct
B (1) and (3) only are correct
C (2) only is correct
D (2) and (3) only are correct.

(2 marks)

- 4** A company prepares its financial statements to 31 December each year. It pays rental costs on an office building annually in advance. It paid rental costs of \$600,000 on 31 May Year 1 and \$660,000 on 31 May Year 2.

What is the expense for office rental for the year to 31 December Year 2?

- A** \$625,000
B \$630,000
C \$635,000
D \$660,000.

(1 mark)

- 5** A company prepares its financial statements to 31 December each year. It hires an item of equipment for the period 1 November Year 1 to 30 April Year 2, at a cost of \$42,000. However, it does not have to pay the hire charge until the end of the hire period, at the end of April Year 2.

What expense for equipment hire, if any, should be included in the income statement for the year to 31 December Year 1?

- A** \$4,000
B \$7,000
C \$14,000
D \$28,000.

(1 mark)

The accounting equation and double-entry book-keeping

Contents

- | | |
|---|--|
| 1 | Business transactions and documents |
| 2 | The accounting equation and business transactions |
| 3 | Book-keeping: accounts, ledgers and books of prime entry |
| 4 | Basic rules of double-entry book-keeping |
| 5 | Account balances: opening and closing balances |

Business transactions and documents

- The main data sources in an accounting system
- Sales transactions
- Sales transactions and accounting records
- Purchase transactions
- Purchase transactions and accounting records
- From source documents to accounting records

1 Business transactions and documents

1.1 The main data sources in an accounting system

An accounting system or book-keeping system records data about business transactions, and this data is eventually used to prepare financial statements at the end of the accounting period.

The data that is recorded comes from a variety of documents, which are often in paper form but might be in electronic form within a computerised system.

Businesses sell goods or services to their customers. They also buy materials and parts and services from suppliers. They hire employees and pay them for the work they do. They also incur other expenses, such as the costs of building rentals, and the costs of gas, electricity and water supply. All these transactions – and more – are recorded in the accounting system of the business.

For many businesses, the main types of business transaction are:

- sales, sometimes for cash but often on credit
- purchases of goods and services, usually on credit
- cash receipts and cash payments.

There are other transactions, which are recorded differently. Payments to employees, for example, are recorded within the payroll system. Purchases of non-current assets are similar to purchases of goods in many ways, although separate records are maintained of non-current assets (in a 'non-current assets register').

For the purpose of the examination, you need to be aware of the documentation and processes within a normal sales transaction cycle and a normal purchases transaction cycle.

The things you need to know are:

- What are the main documents and what is the purpose of each document?
- What information does each document contain?

1.2 Sales transactions

A business might sell goods or services to a customer. This creates revenue or income for the business.

Cash sales

Sales might be for cash, which means that the customer pays immediately, in notes and coin, by debit card, credit card, cheque or by some less common method such as banker's draft.

When a business sells goods for cash, it should give the customer a receipt. It should also keep a record of each sale. In shops, details of each sale transaction are recorded by the equipment at the cash desk. In an old-fashioned cash register, for example, each transaction is printed on a 'till roll'. Computerised point of sale systems in supermarkets and stores record each cash sale transaction automatically.

Credit sales

Many businesses sell their goods or services on credit, which means that they give the customer time to pay. Typically a business will give its customers 30 days credit, meaning that the customer must pay by the end of 30 days from the date of sale.

A credit sale transaction may begin with an order from the customer. Orders are documented. The customer might send his own purchase order. Orders taken verbally, say by telephone, are copied on to a sales order document (or into the seller's computer system, as a **sales order**.)

When the goods are delivered to the customer, the seller often provides a **delivery note**, stating the quantity and type of goods that have been delivered. When goods are sent by post, or when delivery might take some time, the seller might send notice to the customer that the goods have been despatched and are on their way (in a **goods despatched note**). For example, with internet sales the seller will often send a goods despatched note to the customer in the form of an e-mail message.

The seller will also send an invoice to the customer.

Sales invoices

For credit sales, the customer is given a sales invoice. A sales invoice is simply a request for the customer to pay, and it includes details such as:

- the goods or services purchased by the customer
- the amount payable
- if sales tax is payable, the invoice shows the amount payable before sales tax, the sales tax and the total amount payable including sales tax
- the time by when the payment should be made. Customers are expected to pay invoices in full by the latest specified date on the invoice.

Sales invoices also include other information, such as:

- the name and address of the business sending the invoice (on the 'letter head' for the invoice)

- other contact details
- the name and address of the customer, and possibly a customer identity number
- the sales invoice number: a business should number its sales invoices sequentially.

Some invoices have a tear-off counterfoil or **remittance advice**, which the customer is asked to send with the payment. The counterfoil includes the customer's identity number, the invoice number and the total amount payable. A counterfoil helps a business to identify what payments are for when cheques are received through the post.

Statements

Some businesses also send statements to customers, as well as invoices. Statements may be used when a customer buys goods or services regularly. Typically, statements are sent to customers every month or perhaps every three months, listing:

- the amount still owed by the customer at the beginning of the statement period
- the amounts purchased by the customer in the period (each sale/purchase transaction is itemised separately)
- amounts paid by the customer in the period (each payment is itemised separately)
- the amount owed by the customer at the end of the statement period.

Sales returns and credit notes

Sometimes a customer returns goods that have been sold to him. One reason for sales returns is that the goods might be in bad condition and of unsatisfactory quality.

When a customer returns goods, having bought them on credit, it might seem that the logical thing to do is to re-issue an invoice for a smaller amount. In practice, this does not usually happen. Instead, the seller issues the customer with a **credit note**.

Credit notes are, in effect, a reduction in an amount payable, documented as a separate transaction. For example, if there is an invoice to a customer for \$200 and the business agrees to reduce the amount payable by \$40 because some of the goods were of poor quality, a credit note is issued to the customer for \$40. The customer is required to pay \$160, which is the invoice for \$200 less the credit note for \$40.

1.3 Sales transactions and accounting records

The data about sales transactions recorded in an accounting system comes from:

- sales invoices
- credit notes
- payments by customers (e.g. cheque and remittance advice)
- receipts (the seller's copy) in the case of cash sales.

Documents in a sales transaction that are not used to record data in the accounting system are the sales order from the customer, the delivery note or goods despatched note and statements.

1.4 Purchase transactions

Businesses make purchases from suppliers. Purchases are similar in many respects to sales, except that the business is buying from a supplier rather than selling to a customer.

Quotation

For large purchase transactions, or for contracts for the provision of services, a number of potential suppliers might be asked to provide a price quotation. The selected potential suppliers then submit a quotation (including other details, such as terms and conditions) and the buyer decides which one to accept. In many cases, the contract might be given to the supplier who quotes the lowest price.

Purchase order

For each purchase transaction, there should be a **purchase order**. A purchase order may be made verbally, but many businesses want documentary evidence of their purchase orders. So for each purchase transaction, there is a purchase order in writing.

Goods received note

When goods are purchased, the goods are delivered together with the supplier's delivery note. The business might then make its own internal record of the goods received, and for each delivery note will prepare a **goods received note**. The goods received note will include details of the goods delivered by the supplier, with additional details such as the inventory code number of the purchased items.

Purchase invoice

If the purchase is on credit (which is usual) the supplier sends an invoice. This is called a **purchase invoice**. A purchase invoice is the same as a sales invoice, except that it is originated by the supplier. Since they come from other business entities, purchase invoices all look different, because each has the letter heading and invoice design for the particular supplier. Because of this, it is usual for the purchaser to allocate his own sequential number to each suppliers invoice received.

Purchase invoices should be paid by the latest date shown on the invoice.

Regular suppliers might send monthly statements.

Purchase returns

When goods are returned to a supplier, for example because they are faulty, the supplier will issue a credit note. The buyer might also record details of the purchase returns in an internally-produced document, a **debit note**. The details in a debit note should match the details in the credit note that the supplier provides.

Statements and credit notes from suppliers are similar to statements and credit notes sent to customers.

1.5 Purchase transactions and accounting records

The data about purchase transactions recorded in an accounting system comes from:

- purchase invoices
- credit notes from the supplier or debit notes produced internally
- payments to suppliers
- receipts (the purchaser's copy) in the case of cash purchases.

Documents in a purchase transaction that are not used to record data in the accounting system are quotations, the purchase order, and statements received each month from the supplier. Goods received notes might be used to update inventory records, but not all business entities keep up-to-date inventory records.

1.6 From source documents to accounting records

Data in the documents described above are copied into the accounting records. Initially they are copied into 'books of prime entry' (i.e. books where an accounting entry is made for the first time). They are subsequently transferred to 'ledger accounts'.

Books of prime entry, ledgers and accounts in ledgers will be explained later.

The accounting equation and business transactions

- A simple representation of the statement of financial position
- The effect of financial transactions on the accounting equation
- Drawings
- Links between the income statement and the statement of financial position

2 The accounting equation and business transactions

2.1 A simple representation of the statement of financial position

The accounting equation is a simplified way of showing a statement of financial position. The equation is:

$$\begin{array}{ccccccc} \text{Assets} & = & \text{Equity} & + & \text{Liabilities} \\ \mathbf{A} & = & \mathbf{E} & + & \mathbf{L} \end{array}$$

Each new financial transaction affects the numbers in the accounting equation, but the accounting equation must always apply. Total assets must always be equal to the combined total of equity plus liabilities.

The accounting equation is a useful introduction to the preparation of a simple income statement and statement of financial position. It is also a useful introduction to the principles of double-entry book-keeping, and the **duality concept** that every transaction has two aspects that must be recorded.

The accounting equation and the business entity concept

The accounting equation, like the statement of financial position, is based on the business entity concept, that a business is a separate entity from the person or persons who own it. The owner puts capital into the business, and the business 'owes' this to the owner.

For example, suppose that Greg sets up a business 'Greg's Security Services' and puts some capital into the business. The accounting system of the business would consider that 'Greg's Security Services' is an entity on its own, separate from Greg, and that Greg is an owner to which the business owes the capital.

2.2 The effect of financial transactions on the accounting equation

The effect of financial transactions on the accounting equation will be explained by looking at a series of business transactions for a newly-established sole trader's business.



Example 1: setting up a business by introducing capital

Costas has decided to set up in business selling football shirts from a stall in the market place. He begins by putting \$3,000 into a bank account for the business. This transaction sets up the business, and it is recorded in the accounting equation as follows.

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	3,000	=	Capital	3,000	+		0

Capital has been introduced into the new business. This is recorded as the owner's capital. The new business also has cash in the bank, which is an asset. Assets and equity have both increased by \$3,000.



Example 2: borrowing money

Costas then obtains a loan of \$4,000 from his brother to purchase a motor van for the business.

The business acquires a new asset – a motor van – but has also acquired a liability in the form of the loan. Assets and liabilities have both increased by \$4,000.

After the van has been purchased, the accounting equation changes to:

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	3,000						
Van	4,000		Capital	3,000	+	Loan	4,000
	<u>7,000</u>	=		<u>3,000</u>	+		<u>4,000</u>



Example 3: paying cash to buy another asset

Costas buys a market stall and pays \$500 in cash.

The business has used one asset (cash) to acquire a different asset (a stall). There is no change in the total assets, simply a change in the make-up of the assets.

The accounting equation changes to:

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	2,500						
Stall	500						
Van	4,000		Capital	3,000	+	Loan	4,000
	<u>7,000</u>	=		<u>3,000</u>	+		<u>4,000</u>



Example 4: buying assets on credit

Costas now buys some football shirts for \$1,800. He buys these on credit, and does not have to pay for them immediately.

The business has acquired more assets (shirts = inventory). In doing so, it has created another liability, because it now owes money to its supplier, who is recorded as a 'trade payable'. Both assets and liabilities have increased by the same amount.

The accounting equation changes to:

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	2,500						
Inventory	1,800						
Stall	500					Loan	4,000
Van	4,000		Capital	3,000	+	Trade payables	1,800
	<u>8,800</u>	=		<u>3,000</u>	+		<u>5,800</u>



Example 5: cash payment to settle a liability

Costas pays \$1,000 to his suppliers for some of the shirts he purchased.

The payment reduces the liabilities of the business, but also reduces its assets (cash) by the same amount.

The accounting equation changes as follows:

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	1,500						
Inventory	1,800						
Stall	500					Loan	4,000
Van	4,000		Capital	3,000	+	Trade payables	800
	<u>7,800</u>	=		<u>3,000</u>	+		<u>4,800</u>



Example 6: cash sales, cost of sales and profit

Costas sells 50% of the shirts (cost = \$900) for \$1,200 in cash.

The business has sold assets that cost \$900. It has received \$1,200 in cash, and the difference is the profit on the sales. **Profit adds to the owner's capital.**

The accounting equation changes as follows:

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	2,700						
Inventory	900		Capital:				
Stall	500		Original	3,000		Loan	4,000
Van	4,000		Profit	300	+	Trade payables	800
	<u>8,100</u>	=		<u>3,300</u>	+		<u>4,800</u>



Example 7: credit sales, cost of sales and profit

Costas sells shirts for \$900, to a shop owner in another town. These shirts originally cost \$500. He sells the shirts on credit, giving the purchaser one month to pay.

The business has sold for \$900 assets that cost \$500. The difference is the profit of \$400 on the sale. Profit adds to the owner's capital, taking the total profit earned so far from \$300 to \$700. With this transaction, however, the business is still owed money from the customer for the sale.

Money owed by a customer for a sale on credit is called a 'trade receivable'. A trade receivable is an asset.

The accounting equation changes to:

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	2,700						
Inventory	400						
Receivables	900		Capital:				
Stall	500		Original	3,000		Loan	4,000
Van	4,000		Profit	700	+	Trade payables	800
	<u>8,500</u>	=		<u>3,700</u>	+		<u>4,800</u>



Exercise 1

Prepare an accounting equation after each of the following transactions has occurred:

- Transaction A: Costas repays \$1,000 of the loan.
- Transaction B: Costas pays his trade suppliers \$600.
- Transaction C: He receives \$800 of the money owed to him by the customer (trade receivable).
- Transaction D: He purchases another \$250 of shirts, on credit.

Prepare four accounting equations, one for each transaction, assuming that they occur in the sequence listed.

2.3 Drawings

The owner or owners of a business can draw out the profits that the business makes. If they wish to do so, they can draw out all their profits. In practice, however, owners usually draw some profits and leave the rest in the business, to finance the growth of the business.

- Profits that are kept in the business are called retained earnings.
- Profits that are drawn out of the business are called **drawings**, in the case of businesses owned by sole traders or partnerships. Profits paid out to the shareholders of companies are called **dividends**.

Drawings are usually in cash. However, an owner might take out some inventory from the business for his own personal use, or even a larger asset such as a motor car. Taking inventory or other assets is a form of drawing, as well as cash.



Example

Suppose that the accounting equation of Costas after several months is as follows.

Assets	=	Equity	+	Liabilities	
	\$		\$	\$	
Cash	7,700				
Inventory	2,300				
Receivables	1,500	Capital:			
Stall	500	Original	3,000	Loans	2,000
Van	4,000	Profit	9,600	Trade payables	1,400
	<u>16,000</u>	=	<u>12,600</u>	+	<u>3,400</u>

Costas decides to take \$4,000 in cash out of his business, and he also takes inventory with a value of \$200.

The assets of the business are reduced by \$4,200 (cash + inventory), and capital is reduced by the same amount.

The accounting equation now changes as follows.

Assets	=	Equity	+	Liabilities	
	\$		\$	\$	
Cash	3,700				
Inventory	2,100	Capital:			
Receivables	1,500	Original	3,000		
Stall	500	Profit	9,600	Loans	2,000
Van	4,000	Drawings	(4,200)	Trade payables	1,400
	<u>11,800</u>	=	<u>8,400</u>	+	<u>3,400</u>

The drawings are \$4,200 (cash \$4,000 and inventory \$200). The accumulated profits remaining in the business are reduced by the drawings from \$9,600 to \$5,400.

2.4 Links between the income statement and the statement of financial position

A balance sheet shows the financial position of a business at a given point in time, and is a representation of the accounting equation.

An income statement shows the profit or loss for a period of time.

However, there are links between the two financial statements.

- Profit in the income statement affects the statement of financial position, by adding to the owner's capital.
- Drawings out of profits also affect the statement of financial position, by reducing the owner's capital.

2.5 The business equation

The accounting equation is $\text{Assets} = \text{Equity} + \text{Liabilities}$.

Re-arranging this equation, we get: $\text{Assets} - \text{Liabilities} = \text{Equity (or Capital)}$.

The term 'net assets' is sometimes used to mean 'assets minus liabilities'. So we can say that an increase in net assets means a matching increase in equity capital and a fall in net assets means a matching fall in equity capital.

- Profit adds to capital and losses reduce capital.
- Drawings or (in the case of a company) dividends also reduce capital.
- An owner might introduce new capital into the business, by providing it with additional cash (or other assets that previously 'belonged' to the owner and not the business).

From these observations, the following conclusions can be made about the change in net assets during a period of time, such as a financial year.

- Net assets will change in value between the beginning and end of a financial year by the amount of profit (or loss) in the period, new capital introduced and drawings or dividends taken out.
- $\text{Opening net assets} + \text{Profit} + \text{Capital introduced} - \text{Drawings} = \text{Closing net assets}$.

This is called the business equation. From this formula, which contains 5 elements, if you are given the values of any four of the elements, you should be able to calculate the value of the fifth.



Example

Sonny operates a business as a sole trader. On 1 July 2009 the net assets of the business were \$67,000. During the year to 30 June 2010, the business made a profit of \$25,000 and Sonny took out \$22,000 in drawings. Due to a shortage of cash in the business, he re-invested \$4,000 in early June 2010.

The net assets of the business at 30 June 2010 can be calculated as follows.

- Opening net assets + Profit + Capital introduced – Drawings = Closing net assets.
- $\$67,000 + \$25,000 + \$4,000 - \$22,000 = \$74,000$.



Example

Mavis operates a business as a sole trader. On 31 March 2010 the net assets of the business were \$95,000. During the year to 31 March 2010, the business made a loss of \$2,000 and Mavis took out \$15,000 in drawings during the year. She was also required to invest a further \$29,000 during the year.

The opening net assets of the business at 1 April 2009 can be calculated as follows.

- Opening net assets – Loss + Capital introduced – Drawings = Closing net assets.
- Opening net assets – \$2,000 + \$29,000 – \$15,000 = \$95,000.
- Opening net assets = $\$95,000 + \$2,000 - \$29,000 + \$15,000 = \$83,000$.

Book-keeping: accounts, ledgers and books of prime entry

- The dual nature of transactions
- Book-keeping
- Accounts and ledgers
- Books of prime entry (books of original entry)
- Posting transactions from the books of prime entry to the ledger accounts

3 Book-keeping: accounts, ledgers and books of prime entry

3.1 The dual nature of transactions: the duality concept

The accounting equation, and the examples that have been used to describe the accounting equation, should illustrate an important concept in accounting and book-keeping. This is the duality concept, that every transaction has two aspects, or a 'dual nature'.

There is no exception to this rule. Every transaction that affects assets, liabilities, capital, income or expenses has an offsetting effect, so that the accounting equation always applies.

Double entry book-keeping is based on this dual nature of transactions. It involves recording both aspects of the transaction.

3.2 Book-keeping

Book-keeping is the process of recording financial transactions in the accounting records (the 'books') of an entity. Transactions are recorded in accounts, and there is a separate account for each different type of transaction.

3.3 Accounts and ledgers

There are accounts for:

- each type of asset, liability, income and expense, and accounts for the owners' capital
- each customer who purchases goods or services on credit
- each supplier from which goods or services are bought on credit.

Accounts are kept together in a **ledger**. A ledger is a term meaning a collection of related accounts. There are usually three ledgers in a financial accounting system:

- The **main ledger**, usually called either the **nominal ledger** or the **general ledger**. This ledger contains the accounts for:
 - assets, liabilities and capital
 - income and expenses.

- The **receivables ledger**, which contains the accounts for each customer who is sold items on credit. Each receivables account shows how much the individual customer has purchased on credit, details of sales returns (i.e. any credit notes), how much he has paid and what he currently owes.
- The **payables ledger**, which contains the accounts for each supplier of goods or services on credit. Each trade payables account shows how much the entity has bought on credit from a particular supplier, details of purchase returns, how much it has paid and what it currently owes to the supplier.

3.4 Books of prime entry (books of original entry)

In a manual accounting system (a system that is not computerised) individual transactions are not recorded in the ledger accounts as they occur, because this would be too time-consuming. Instead, they are recorded initially in books of prime entry, or books of original entry. They are transferred at a later time from the books of prime entry to the accounts in the ledgers.

The books of original entry are:

- a sales day book, for recording sales on credit (receivables) from sales invoices
- a sales returns day book, for recording items returned by credit customers (credit notes issued to customers)
- a purchases day book, for recording purchases on credit from suppliers (trade payables) from purchase invoices
- a purchases returns day book for recording returns of purchases on credit
- a cash book, for recording cash received into the business bank account and cash paid out of the bank account
- a petty cash book, for recording transactions relating to petty cash: petty cash consists of notes and coins held by a business to pay for small incidental expenses such as bus or taxi fares, or coffee and milk for the office
- a journal for recording transactions that are not recorded in any of the other books of original entry.

The books of prime entry are described in more detail later in this chapter.

3.5 Posting transactions from the books of prime entry to the ledger accounts

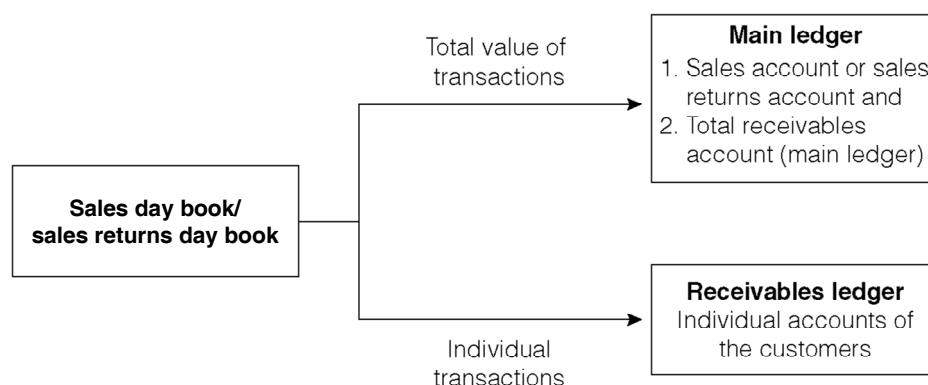
The process of transferring the details of transactions from the books of prime entry to the accounts in the ledgers is sometimes called '**posting**' the transactions. It is done as follows.

From the sales day book (or sales returns day book) to (1) the main ledger and (2) the receivables ledger

Details of sales on credit (and also details of any credit notes for sales returns) are posted from the sales day book (or sales returns day book) to two ledgers. The total value of sales (or total value of sales returns) is recorded in the main ledger in two accounts, the sales account and the account for total receivables, to reflect the dual nature of the transaction. Details of each individual sales transaction with credit

customers are also posted to the personal account for the customer, which is kept in the receivables ledger.

1. Sales on credit/sales returns



Example

Suppose that a sales day book contains the following three transactions that have not yet been posted to the ledger accounts.

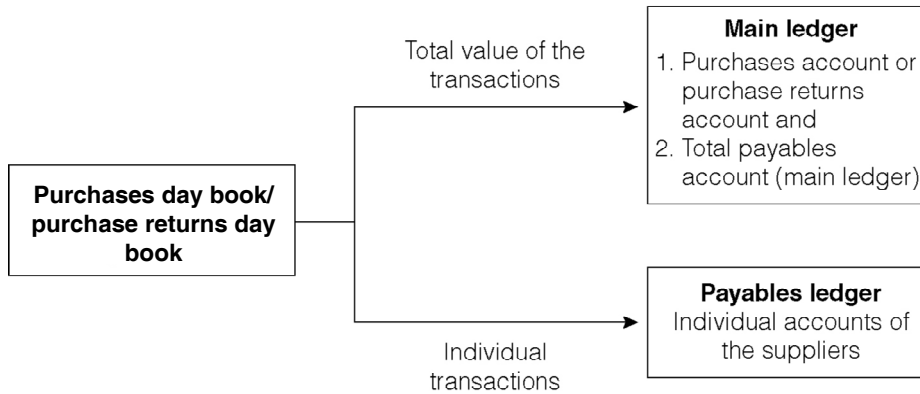
Customer	Sale on credit/amount owed by customer
	\$
Entity Green	250
P Rose	100
Yellow Company	400
	<u>750</u>

If these transactions are posted to the ledgers:

- Sales of \$750 will be recorded in the **main ledger**, both as \$750 of sales and \$750 of money now owed by customers (trade receivables).
- In the **receivables ledger**, sales on credit of \$250 will be recorded in the individual account for Entity Green, sales of \$100 in the account for P Rose and sales of \$400 in the account for Yellow Company.

From the purchases day book (or purchase returns day book) to (1) the main ledger and (2) the payables ledger

Details of purchases of goods on credit (and also details of any credit notes from suppliers for purchase returns) are posted from the purchases day book (or purchase returns day book) to two ledgers. The total value of purchases (or total value of purchase returns) is recorded in the main ledger in two accounts, the purchases account and the account for total trade payables, to reflect the dual nature of the transaction. Details of each individual purchase transaction with suppliers are also posted to the personal account for the supplier, which is kept in the payables ledger.

2. Purchases on credit/purchases returns

The purchase ledger is also used to record purchase invoices from suppliers of other items, as well as purchases of goods. For example the purchase ledger is used to record details of invoices for rental costs of buildings or equipment, and invoices for telephone expenses and electricity and gas supplies.

Details of these expenses are posted from the purchases ledger to the main ledger, and the accounts for:

- the relevant expense, and
- total trade payables.

Details of each individual invoice are also posted to the account of the individual supplier in the payables ledger.

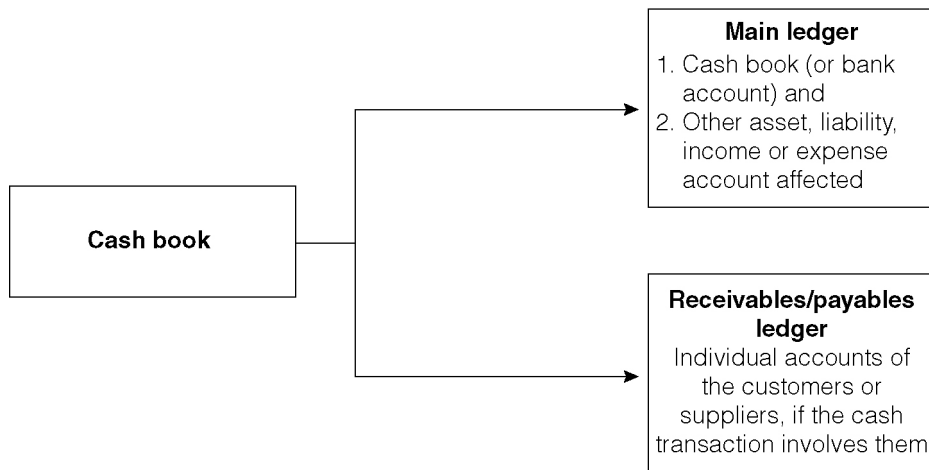
From the cash book to (1) the main ledger and (2) the receivables or payables ledger

The cash book in a manual accounting system is often used as both a book of prime entry and as an account in the main ledger. However it might be convenient to think of the cash book as a book of prime entry and a different account, the bank account, as an account in the main ledger.

The cash book has two sides, a side for receipts of money and a side for payments.

Details of cash received are posted to the main ledger, where the dual nature of the transaction is recorded. For example money received from a credit customer is recorded as an addition to money in the bank and a reduction in trade payables. Money received for a cash sale is recorded as an addition to money in the bank and an increase in total revenue from cash sales.

If the cash is received from a credit customer, the details of the money received are also recorded in the customer's personal account in the receivables ledger.

3. Cash received/paid

Cash payments are recorded in a similar way to cash receipts. Payments are recorded in both the main ledger and (if the payment is to a supplier) in the account of the supplier in the payables ledger.

**Example**

Suppose that the cash book (payments side) contains the following transactions that have not yet been posted to the ledgers.

Supplier	Cash payment to the supplier
	\$
Sepia Company	300
G Red	150
Blue Company	550
	<u>1,000</u>

These transactions are posted to the ledgers as follows:

- Payments of \$1,000 will be recorded in the main ledger, both as payments of \$1,000 from the bank account and \$1,000 of money paid to suppliers (trade payables).
- In the payables ledger, a payment of \$300 will be recorded in the individual account for Sepia Company, a payment of \$150 in the account for G Red and a payment of \$550 in the account for Blue Company.

Basic rules of double entry book-keeping

- Debit and credit entries, and T accounts
- The rules of debits and credits
- Double entry book-keeping and the cash account
- Using journal entries to record transactions

4 Basic rules of double entry book-keeping

4.1 Debit and credit entries, and T accounts

Financial transactions are recorded in the accounts in accordance with a set of rules or conventions. The following rules apply to the accounts in the main ledger (nominal ledger or general ledger).

- Every transaction is recorded twice, as a debit entry in one account and as a credit entry in another account.
- Total debit entries and total credit entries must always be equal. This maintains the accounting equation.

It therefore helps to show accounts in the shape of a T, with a left-hand and a right-hand side. By convention:

- debit entries are made on the left-hand side and
- credit entries are on the right-hand side.

Account name			
Debit side		Credit side	
Debit transactions entered	\$	Credit transactions entered	\$
on this side	Amount	on this side	Amount
Enter reference to the	XX	Enter reference to the	XX
account where the matching		account where the	
credit entry is made		matching debit entry is	
		made	

4.2 The rules of debits and credits

In the main ledger, there are accounts for assets, liabilities, equity, income and expenses. The rules about debits and credits are as follows.

Account	
Debit side	Credit side
Record as a debit entry: An increase in an asset (asset account) An increase in an expense (expense account)	Record as a credit entry: An increase in a liability (liability account) An increase in income (income account: for example, sales in the sales account) An increase in capital (capital account: for example, profit or new capital introduced to the business)
Record as a debit entry: A reduction in a liability (liability account) A reduction in income (for example, a debit in the sales returns account)	Record as a credit entry: A reduction in an asset (asset account) A reduction in an expense (expense account: for example, purchases returns are a debit in the purchase returns account, because they reduce the cost of purchases)
A reduction in capital (drawings, losses)	

You need to learn these basic rules and become familiar with them. Remember that in the main ledger, transactions entered in the debit side of one account must be matched by an offsetting credit entry in another account, in order to maintain the accounting equation and record the dual nature of each transaction.

For example, if a purchase invoice is received for electricity charges for \$2,300, the double entry is (ignoring sales tax):

- Debit: Electricity charges (= increase in expense)
- Credit: Total trade payables (= increase in liability)

The rules of double entry apply only to the main ledger and not to the receivables ledger or payables ledger, because there are accounts for total receivables and total payables in the main ledger. Transactions recorded in individual customer accounts in the receivables ledger or in individual supplier accounts in the payables ledger are entered in just one side of the appropriate individual customer or supplier account.

Dr and Cr

By convention, the terms 'debit' and 'credit' are sometimes shortened to 'Dr' and 'Cr' respectively.

4.3 Double entry book-keeping and the cash account

It might help to learn the rules of double entry by remembering that transactions involving the receipt or payment of cash into the bank account are recorded as follows:

- The Cash account, also called the Bank account, is an asset account (money in the bank is an asset).
- Receipts of cash: These are recorded as a debit entry in the Cash account or Bank account, because receipts add to cash (an asset).
- Payments of cash. Payments reduce cash, so these are recorded as a credit entry in the Cash account or Bank account.

Cash account (Bank account) in the main ledger

Debit side	Credit side
Record as a debit entry: Transactions that provide an INCREASE in cash The matching credit entry might be to (1) a sales account, for cash sales), (2) the total trade receivables account, for payments received from credit customers (3) the capital account (for new capital introduced by the owner in the form of cash)	Record as a credit entry: Transactions that result in a REDUCTION in cash The matching debit entry might be to (1) an expense account, for payments of cash expenses, (2) the total trade payables account, for payments to suppliers for purchases on credit/amounts owing, (3) a payment in cash for a new asset, (4) a drawings account, for withdrawals of profit by the business owner



Example

Transaction 1: Sam sets up a business by putting \$5,000 into a bank account.

This increases the cash of the business, and its capital.

Capital account			
	\$		\$
		(1) Bank	5,000
Bank account			
	\$		\$
(1) Capital	5,000		

Notes:

- (a) The entry in each account shows the other account where the matching debit or credit entry appears.
- (b) The numbers are included for illustrative purposes only, to help you to match the debit and credit entry for each transaction.

Transaction 2: Sam purchases goods for \$4,000, paying \$1,000 in cash and buying \$3,000 of goods on credit.

Total purchases are an addition to expenses (purchases). The purchases reduce cash by \$1,000 and increase trade payables by \$3,000.

Bank account			
	\$		\$
Capital	5,000	(2a) Purchases	1,000

Purchases account			
	\$		\$
(2a) Bank	1,000		
(2b) Trade payables	3,000		

Trade payables account			
	\$		\$
		(2b) Purchases	3,000

The purchases account is an expense account and the trade payables account is a liability account.

Note on purchases of inventory

Notice that in this type of book-keeping system, there is no separate account for inventory. Purchases of materials and goods for re-sale are recorded in a purchases account, which is an expense account. Inventory is ignored until the end of an accounting period, when it is counted and valued, and the value of the 'closing inventory' is entered in an inventory account.

Transaction 3. Sam sells goods for \$6,000. \$2,000 of these sales are in cash and the other \$4,000 are on credit.

Total sales (income) are \$6,000, and the sales result in an increase in total assets of \$6,000, consisting of cash (\$2,000) and trade receivables (\$4,000).

Bank account			
	\$		\$
Capital	5,000	Purchases	1,000
(3a) Sales	2,000		

Receivables account			
	\$		\$
(3b) Sales	4,000		

Sales account

	\$		\$
		(3a) Bank	2,000
		(3b) Receivables	4,000

Transaction 4. Sam purchases some equipment for the business, costing \$3,000. He pays by cheque.

This transaction adds to the non-current assets of the business, and reduces cash. An increase in one asset (equipment) is therefore matched by a reduction in another asset (cash).

Bank account

	\$		\$
Capital	5,000	Purchases	1,000
Sales	2,000	(4) Equipment	3,000

Equipment account

	\$		\$
(4) Bank	3,000		

Transaction 5. Sam pays rent of \$1,000 for six months, for office accommodation. Rent is an expense. The rental cost adds to expenses and reduces cash.

Bank account

	\$		\$
Capital	5,000	Purchases	1,000
Sales	2,000	Equipment	3,000
		(5) Rent	1,000

Rent account

	\$		\$
(5) Bank	1,000		

**Exercise 2**

Donald sets up a trading business, buying and selling goods. The following transactions occurred during his first month of trading.

Transaction	Details
1	Donald introduced \$50,000 into the business by paying money into a business bank account.
2	The business bought a motor van for \$6,000. Payment was by cheque.
3	The business bought some inventory for \$3,000, paying by cheque.
4	All the inventory purchased (transaction 3) was sold for \$5,000 in cash.
5	More inventory was purchased for \$10,000. The purchase was on credit.
6	50% of the inventory purchased in transaction 5 was sold for \$8,000. All these sales were on credit.

- 7 A payment of \$3,000 was made to a supplier for some of the purchases.
- 8 A payment of \$4,000 was received from a customer for some of the sales on credit.
- 9 Donald drew \$1,000 from the bank account for his personal use.
- 10 Donald paid \$200 for diesel for the motor van.
- 11 The business paid \$1,500 by cheque for the premium on an insurance policy.
- 12 The business received a bank loan of \$10,000, repayable in two years.

Required

Record these transactions in the main ledger accounts of the business, using the following format.

Account name					
Transaction number	Name of account containing the matching double entry	\$ Amount	Transaction number	Name of account containing the matching double entry	\$ Amount

4.4 Using journal entries to record transactions

The journal is a book of prime entry that is used to record transactions that are not recorded in any other book of original entry. The use of the journal to record corrections of errors will be explained in a later chapter.

You might be required to record double entry transactions as 'journal entries'. This is simply a requirement to show the debit and credit entries for a transaction, without preparing T accounts. The format of a journal entry is as follows:

	Debit	Credit
	\$	\$
Name of the account with the debit entry	X	
Name of the account with the credit entry		X
Narrative explaining or describing the transaction		

The narrative should give an accurate explanation of the nature of the transaction. You might well be required to deal with an exam question that asks you to identify a journal entry where the narrative is incorrect for the given double entry.

**Example**

Prepare the journal entries for the following transactions:

- (1) The owner of a business put \$7,000 into the business bank account as new capital.
- (2) Sales on credit were \$25,000.

a**Answer**

	Debit	Credit
1	\$	\$
Bank account	7,000	
Capital		7,000
<u>Capital introduced into the business</u>		
2		
Trade receivables	25,000	
Sales		25,000
Sales on credit		

Transactions recorded in the journal are posted to the main ledger accounts.

e
2**Exercise 3**

Record the following transactions as journal entries:

- (i) Payment to a credit supplier of \$1,000
- (ii) Cash sale of \$100
- (iii) Credit sale of \$2,000
- (iv) Purchase on credit of \$1,500

Account balances: opening and closing balances

- Account balances and a trial balance
- Closing balance and opening balance
- From trial balance to income statement and balance sheet

5 Account balances: opening and closing balances

5.1 Account balances and a trial balance

At any time, the balance on an account can be established. The balance on an account is the difference between the total value of debit entries and the total value of credit entries.

- If total debits exceed total credits, there is a debit balance
- If total credits exceed total debits there is a credit balance.

In the previous example in paragraph 4.3, the debit and credit balances on the main ledger accounts are as follows, at the end of transaction number 5.

Debit balances	\$	Credit balances	\$
Bank	2,000	Capital	5,000
Purchases	4,000	Trade payables	3,000
Receivables	4,000	Sales	6,000
Equipment	3,000		
Rent	1,000		
	<u>14,000</u>		<u>14,000</u>

Total debit balances and total credit balances should always be equal. A list of the debit and credit balances in the main ledger accounts is called a **trial balance**.

At any time, it should be possible to 'extract' a trial balance from the main ledger, and prepare a list of debit balances and credit balances. If the accounts have been prepared correctly, total debit balances and total credit balances must be equal.

Closing off an account at the end of an accounting period

The debit or credit balance on an individual account at the end of an accounting period can be recorded by 'closing off' the account. The balance on the account is recorded as an 'opening balance' on the account at the start of the next period. This is explained in more detail below.

5.2 Closing balance and opening balance

At the end of an accounting period, an account is closed off. On many accounts (particularly asset, liability and capital accounts), there will be a balance.

- Balances on expense accounts and income accounts are transferred to the income statement. (Note: There might be some accruals and prepayments on expense accounts. These are explained in a later chapter.)
- Balances on the asset, liability and capital accounts are carried forward as closing balances at the end of the period, and become opening balances at the beginning of the next period.

To close off an account, the closing balance is entered in the T account so that total debits and total credits are equal. The debit and credit columns are then totalled and a line drawn underneath the entries. Below the line, the opening balance for the beginning of the next period is entered.



Example

Bank account			
	\$		\$
Capital	5,000	Purchases	1,000
Sales	2,000	Equipment	3,000
		Rent	1,000
		Closing balance c/f	2,000
	<u>7,000</u>		<u>7,000</u>
Opening balance b/f	2,000		

In this example, there is a debit balance on the bank account at the end of the period. The closing balance to carry forward is entered on the credit side, so that total debits and total credits add up to \$7,000. The debit balance of \$2,000 is brought forward as the opening balance on the account at the beginning of the next period. This indicates that the business has an asset (a debit balance) of cash in the bank account totalling \$2,000.

Note

c/f stands for carried forward. You might also see:

- c/fwd (for carried forward), or
- c/d for 'carried down'.

Similarly, b/f stands for brought forward. You might also see:

- b/fwd (for brought forward), or
- b/d for 'brought down'.

A similar method of carrying forward the closing balance is used for liability accounts such as trade payables, and the capital account. When the trade payables account below is balance there is a closing balance of \$1,500 indicating that \$1,500 is payable to suppliers in total – this is a credit balance as it is a liability.

Trade payables account			
	\$		\$
Bank	2,500	Purchases	3,000
Bank	5,000	Purchases	2,000
Balance c/d	1,500	Purchases	4,000
	<u>9,000</u>		<u>9,000</u>
		Balance b/d	1,500

Practice multiple choice questions

- 1 The double entry for a credit sales transaction for \$500 is:
 - A Debit Cash \$500, Credit Sales \$500
 - B Debit Sales \$500, Credit Cash \$500
 - C Debit Receivables \$500, Credit Sales \$500
 - D Debit Sales \$500, Credit Receivables \$500 (1 mark)

- 2 When a business entity agrees to accept sales returns from a customer, the appropriate document to produce is:
 - A a credit note
 - B a debit note
 - C a revised sales invoice
 - D a remittance advice (1 mark)

- 3 Is the narrative correct for the associated journal entry?

	Debit	Credit
	\$	\$
Bank		240
Finance charges (interest)	240	
Interest received on a bank deposit		

 - A The narrative is correct for the journal entry.
 - B The narrative is NOT correct for the journal entry. (1 mark)

- 4 Which of the following make use of the double entry accounting method?
 - 1 Receivables ledger
 - 2 Main ledger
 - 3 Journal
 - 4 Sales returns day book
 - A 1, 2 and 3 only
 - B 2, 3 and 4 only
 - C 1 and 4 only
 - D 2 and 3 only (2 marks)

- 5 What double entry is required to close off the following bank account at the end of the accounting period?

Bank account			
	\$		\$
Opening balance b/f	300	Purchases	12,000
Sales	200	Wages and salaries	18,500
Receivables	38,200	Drawings	1,000

- A** Debit side: Closing balance c/f \$6,900. Credit side: Opening balance b/f \$6,900
B Debit side: Opening balance b/f \$6,900. Credit side: Closing balance c/f \$6,900
C Debit side: Closing balance c/f \$7,200. Credit side: Opening balance b/f \$7,200
D Debit side: Opening balance b/f \$7,200. Credit side: Closing balance c/f \$7,200
- (2 marks)**
- 6 A business entity makes a large loss on a business transaction. Which of the following items will always be reduced in value as a result of a loss?
- 1 Cash balance
 - 2 Total assets
 - 3 Capital
 - 4 Total liabilities
- A** 1, 2 and 3 only
B 1 and 3 only
C 2 and 3 only
D 1, 2, 3 and 4
- (2 marks)**
- 7 Which of the following would result in a debit entry in an expense account?
- A** Payment in cash for postage stamps
B Payment to a supplier for a credit purchase of goods
C Purchase return of goods to a supplier
D Receipt of loan from a bank
- (2 marks)**
- 8 The owner of a business invests a further \$80,000 in the business. Which elements of the accounting equation will be affected by this transaction?
- A** Assets and liabilities only
B Assets only
C Capital and assets only
D Capital only
- 9 The following information relates to the sole trader business of Monty.

\$

Net assets at 30 June 2010	62,500
Capital introduced during the year to 30 June 2010	17,500
Profits in the year	42,600
Drawings in the year	35,900

What was the balance on Monty's capital account on 1 July 2009?

- A** \$38,300
- B** \$51,700
- C** \$73,300
- D** \$86,700

Recording transactions: sales, purchases and cash

Contents

- | | |
|---|---|
| 1 | Recording transactions: sales and purchases |
| 2 | Accounting for sales tax |
| 3 | More about books of prime entry |
| 4 | Petty cash |

Recording transactions: sales and purchases

- Sales and purchases on credit: the basic rules
- Sales returns and purchase returns
- Discounts
- Discounts received and discounts allowed
- Accounting for discounts received and discounts allowed
- Discounts allowed and received: the receivables and payables ledgers
- Contra entries

1 Recording transactions: sales and purchases

1.1 Sales and purchases on credit: the basic rules

The previous chapter explained the general principles of double-entry book-keeping and also the use of:

- accounts for total receivables and total payables in the main ledger, and
- individual accounts for credit customers and suppliers in the receivables and payables ledgers.

The main ledger (nominal ledger or general ledger) is used to record the total value of transactions relating to customers who buy on credit and the total value of transactions with suppliers. At the same time, transactions relating to individual customers and individual suppliers are recorded in their personal accounts, in the receivables ledger or payables ledger.

The basic rules for recording sales and purchases on credit are as follows:

Sales on credit	Debit	Credit
Main ledger		
Receivables	X	
Sales		X
Receivables ledger		
Individual customer accounts	X	
Purchases on credit	Debit	Credit
Main ledger		
Purchases	X	
Trade payables		X
Payables ledger		
Individual supplier accounts		X

These are the accounting entries that would be made by a business entity that does not have an inventory control system, and does not maintain up-to-date records for inventory.

1.2 Sales returns and purchase returns

Sales returns and purchase returns are accounted for in a similar way. It is usual to keep separate accounts in the main ledger for:

- sales returns, and
- purchase returns.

The effect of sales returns is to reduce the amount of:

- sales revenue, and
- receivables.

However, although sales returns reduce total sales revenue for the accounting period, they are recorded initially in a separate account in the main ledger.

The effect of purchase returns is to reduce:

- total purchases and
- trade payables.

However, although purchase returns reduce total purchases for the accounting period, they are recorded initially in a separate account in the main ledger.

The basic rules for recording sales returns and purchase returns are therefore as follows:

Sales returns	Debit	Credit
Main ledger		
Sales returns	X	
Receivables		X
Receivables ledger		
Individual customer accounts		X
 Purchase returns	 Debit	 Credit
Main ledger		
Trade payables	X	
Purchase returns		X
Payables ledger		
Individual supplier accounts	X	

1.3 Discounts

When we record transactions with credit customers and suppliers we may need to deal with discounts. There are two main types of discount:

- trade discount
- cash discount or settlement discount

Trade discount

A trade discount is a reduction in the list price of goods which is given to some trade customers. This is often due to the long-term nature of the relationship

between the customer and the supplier or due to the large quantity of purchases made by the customer. (Trade discounts are sometimes known as bulk purchase discounts.)

The trade discount is deducted from the list price of the goods in the invoice and the customer then pays the amount shown in the invoice. It is very unusual to show the amount of the trade discount in the invoice. In accounting terms the trade discount is ignored and the only amount that needs to be recorded is the amount shown in the invoice, which is the actual price for the goods.



Example

Apple sells goods with a list price of \$10,000 to Orange and gives Orange a 20% trade discount as he is a long-standing customer.

The goods will be recorded on Apple's sales invoice as:

	\$
List price	10,000
Less: Trade discount	<u>(2,000)</u>
Net price	<u>8,000</u>

Apple will record the sale at the net price of \$8,000 and Orange will record the purchase at the net price of \$8,000.

Cash discounts or settlement discounts

A cash discount or settlement discount is offered to credit customers in return for early payment. It is offered to persuade customers to pay the amounts due before the end of the normal credit period.



Example

Apple has sent an invoice for \$8,000 for goods to Orange, and the invoice states that normal credit terms are 30 days. However the invoice also offers a settlement discount of 4% if payment is made within 10 days.

Orange now has a choice:

- to wait for 30 days and pay the full amount due of \$8,000, or
- to pay within 10 days and pay only \$7,680 (the \$8,000 invoice total less the 4% settlement discount of \$320 ($\$8,000 \times 4\%$))

1.4 Discounts received and discounts allowed

Discounts received are settlement discounts that a business has been offered by its suppliers and which it takes up. The business pays earlier but pays less.

Discounts allowed are settlement discounts that a business offers to its credit customers. It is up to the customer to decide whether to pay the full amount or to pay the smaller amount earlier.

1.5 Accounting for discounts received and discounts allowed

Discounts received and discounts allowed are recorded in the ledger accounts. For example, if a settlement discount of \$320 is received on an invoice for \$8,000 and only \$7,680 is paid, we record the discount received of \$320, the total amount payable in the purchase invoice (\$8,000) and the actual cash payment of \$7,680.

Discounts received

Discounts received from suppliers are recorded in a discounts received account. If a business decides to take up the offer of a settlement discount by paying the smaller amount sooner, the double entry for the payment is:

Debit	Trade payables (the amount payable in the invoice)
Credit	Bank (the amount actually paid)
Credit	Discount received (the discount received)

The entry in the discount received account is a credit entry because it is effectively a reduction in an expense. (You might prefer to think of it instead as a form of income.) In the income statement, it will be shown either as 'other income' or as a negative expense.

Discounts received do not affect the total figure for purchases in the period, or the total cost of sales. In this respect they differ from purchase returns, which do reduce total purchase costs.

- Discounts received are accounted for as an addition to profit in the period.
- They are not accounted for as a deduction from purchase costs.

Discounts allowed

Discounts allowed to customers are recorded in a discounts allowed account. A business will only know if a customer is taking a settlement discount that has been offered when the payment is received. If the customer has taken the discount then a smaller payment will be received. The double entry is:

Debit	Bank (the amount of cash received)
Debit	Discount allowed (the discount taken by the customer)
Credit	Trade receivables (the full amount of the invoice value)

The discount allowed entry is a debit entry as this is an expense of the business. Discounts allowed are shown as expenses in the income statement.

Discounts allowed do not affect the total figure for sales in the period. In this respect they differ from sales returns, which do reduce total sales revenue.

- Discounts allowed are accounted for separately as an expense for the period.
- They are not accounted for as a deduction from total sales revenue.



Example

Apple has sent an invoice for \$8,000 for net goods to Orange and the invoice states that normal credit terms are 30 days. However the invoice also offers a settlement discount of 4% if payment is made within 10 days.

Orange takes up the offer of the settlement discount.

How should the payment be recorded in the ledger accounts of:

- (a) Apple?
- (b) Orange?



Answer

Apple's accounts

For Apple this is a discount allowed to a customer:

Debit	Bank	\$7,680	
Debit	Discount allowed	\$320	
Credit	Trade receivables		\$8,000

Orange's accounts

For Orange this is a discount received from a supplier:

Debit	Trade payables	\$8,000	
Credit	Bank		\$7,680
Credit	Discount received		\$ 320

1.6 Discounts allowed and received: the receivables and payables ledgers

Discounts received and discounts allowed must also be recorded in the individual supplier and customer accounts in the purchase ledger or sales ledger.

When discounts are received from suppliers, the entry in the account of the supplier in the payables ledger is:

Credit:	Amount of cash payment
Credit:	Discount received

Similarly when a discount is allowed to a credit customer the entry in the account of the customer in the receivables ledger is:

Debit:	Amount of cash received payment
Debit:	Discount allowed.

Transactions in the receivables ledger

Consider the following transactions.

	\$
(1) Sales on credit	
(a) Customer A	4,000
(b) Customer B	5,000
(c) Customer C	3,000
(d) Customer D	2,000
	14,000
(2) Sales returns	
(a) Customer A	500
(3) Cash received from:	
(a) Customer B	4,800
(b) Customer C	1,000
	5,800
(4) Early settlement discount taken	
(a) Customer B	200
(5) Bad debt written off	
(a) Customer D	2,000

These transactions are recorded as follows.

In the receivables ledger:

Customer A account					
		\$			\$
Sales	(1) (a)	4,000	Sales returns	(2) (a)	500
Customer B account					
		\$			\$
Sales	(1) (b)	5,000	Bank	(3) (a)	4,800
			Discounts allowed	(4) (a)	200
Customer C account					
		\$			\$
Sales	(1) (c)	3,000	Bank	(3) (b)	1,000
Customer D account					
		\$			\$
Sales	(1) (d)	2,000	Bad debts	(5) (a)	2,000

Tutorial note: The write off of a bad debt will be covered in detail in a later chapter.

The balances on the accounts in the receivables ledger in total are:

Balances	\$
Customer A	3,500
Customer C	2,000
Total	<u>5,500</u>

In the main ledger, the transactions are recorded as follows:

Sales account				
		\$		\$
			Trade receivables	(1) 14,000
Sales returns account				
		\$		\$
Trade receivables	(2)	500		
Bank account				
		\$		\$
Trade receivables	(3)	5,800		
Discounts allowed account				
		\$		\$
Trade receivables	(4)	200		
Bad debts account				
		\$		\$
Trade receivables	(5)	2,000		
Trade receivables account				
		\$		\$
Sales	(1)	14,000	Sales returns	(2) 500
			Bank	(3) 5,800
			Discounts allowed	(4) 200
			Bad debts	(5) 2,000
			Closing balance c/f	<u>5,500</u>
		<u>14,000</u>		<u>14,000</u>
Opening balance b/f		5,500		

Note: **Discounts allowed** to customers and **bad debts** are both expense accounts.

Note also that the balance on the total trade receivables account in the main ledger is equal to the sum of the individual account balances in the receivables ledger.

Transactions in the payables ledger

Transactions in the payables ledger for individual suppliers are recorded in a similar way. If you can understand the transactions in the receivables ledger, you should be able to work out the appropriate accounting entries for payables.

For your examination, you might be required to calculate the value of a 'missing item' in a receivables or trade payables account, and it is important that you should understand how entries are recorded in these accounts, on the debit or the credit side.



Exercise 1

Record the following transactions in both the payables ledger accounts for trade suppliers and also in the main ledger.

	\$
Purchases on credit	
Supplier W	3,000
Supplier X	6,000
Supplier Y	2,000
Supplier Z	7,000
	<u>18,000</u>
Purchase returns	
Supplier X	2,000
Cash paid to	
Supplier W	2,900
Supplier Z	2,500
	<u>5,400</u>
Early settlement discount received	
Supplier W	100

1.7 Contra entries

A contra entry in book-keeping is a double entry that offsets one amount against another. An example of a contra entry occurs when a business entity sells goods or services to another entity, and also buys goods or services from the same entity. The other entity is both a customer and a supplier, and might therefore be a receivable and a trade payable at the same time. When this happens, the two entities might agree to offset the amounts that they owe each other, leaving a net amount payable by the entity with the higher debt.

A contra entry records the offsetting of these amounts.

Contra entries must be made in the main ledger and also the receivables and payables ledgers:

- In the main ledger:
 - Debit: Trade payables
 - Credit: Trade receivables
- In the receivables ledger
 - Credit: The individual customer account
- In the payables ledger
 - Debit: The individual supplier account.



Example

Entity A buys goods from Entity Z, and also sells services to Entity Z. Entity A currently owes \$12,000 to Entity Z and is owed \$5,000 by Entity Z.

It might be agreed to offset these two debts, leaving Entity A owing \$7,000 to Entity Z.

A contra entry is used to record this agreement in the accounting system.

	Debit	Credit
In the main ledger	\$	\$
Debit: Payables control account	5,000	
Credit: Receivables control account		5,000
(This reduces the balance on both control accounts)		
In the receivables ledger:		
Credit the account of Entity Z		5,000
In the payables ledger:		
Debit the account of Entity Z	5,000	

Accounting for sales tax

- The nature of sales tax
- The accounting treatment of sales tax
- Note on the sales tax arithmetic
- Sales tax and discounts

2 Accounting for sales tax

2.1 The nature of sales tax

Many countries have a tax on sales, where the tax is collected for the government by the businesses that make the sales. In the UK, sales tax is called value added tax or VAT.

The rules relating to sales tax are similar for most countries, and accounting for sales tax is therefore also similar.

Business entities are required to register as sales tax collectors. A business that is registered for the sales tax:

- must charge tax at the appropriate rate on the goods or services that it sells,
- collects the tax for the government,
- but can claim a repayment of the sales tax that it pays on its own purchases.

Since a registered business collects tax on its sales and reclaims the tax that it has paid, it is required to pay to the government only the difference between:

- sales tax collected, and
- sales tax paid.

Sales tax on goods or services sold	A
Less: Sales tax on purchases	B
Equals: Net payment of tax to the tax authorities	<u>A – B</u>



Example

Entity A operates a stone quarry, and sells a piece of stone to Entity B for \$500 plus sales tax of 10%. Entity B specialises in making stone work surfaces for kitchens. It uses the stone it has bought to make a kitchen work surface that it sells to Entity C for \$2,000 plus sales tax at 10%. Entity C sells the work surface to a customer for \$3,000 plus sales tax at 10%.

Entities A, B and C are all registered as tax collectors.

In this simplified example, the payments of the sales tax are as follows:

	Entity A	Entity B	Entity C	Final customer
	\$	\$	\$	\$
Sales tax collected	50	200	300	0
Sales tax paid	0	50	200	300
Payment of tax to the government	50	150	100	-

This example should illustrate that all the sales tax is paid by the final customer for the finished consumer product. The tax on the final product is \$300 (10% of \$3,000). However, the tax is paid to the government at different stages in the 'supply chain', from the sale of the original raw materials to the sale of the final product. In this example, the total tax of \$300 is paid in three stages, \$50 by A, \$150 by B and \$100 by C.

Each business entity must record the sales tax that it collects, and the sales tax that it pays, and account to the government (tax authorities) for the difference.

2.2 The accounting treatment of sales tax

Sales tax charged on sales to customers is not a part of the sales revenue of a business. It is money payable to the government as tax.

Sales tax on purchases is not a part of the purchase costs or expenses of a business. It is a tax that is paid but then reclaimed from the government.

However, customers must pay the full sales price, including the sales tax. Similarly, amounts payable to a supplier include the sales tax payable.

The accounting treatment of sales tax is therefore as follows.

Sales tax and sales	Debit	Credit
Trade receivables (credit sales) or Bank (cash sales)	X	
This debit includes the sales tax in the total amount		
Sales (excluding sales tax)		X
Sales tax account (tax on the sales)		X
 Sales tax and purchases	 Debit	 Credit
Purchases (excluding sales tax)	X	
Sales tax account (tax on the purchases)	X	
Trade payables (purchases on credit) or Bank (cash purchases)		X
This credit includes the sales tax in the total amount		



Example

A company sells goods for \$10,000 plus sales tax of 18%. These transactions should be recorded in the main ledger as follows:

Sales account			
	\$		\$
		Trade receivables	10,000

Sales tax account			
	\$		\$
		Trade receivables	1,800

Trade receivables account			
	\$		\$
Sales/ Sales tax	11,800		

Sales tax account

The sales tax account is an asset/liability account. The balance on the account represents the difference between the sales tax on sales and the sales tax on purchases. The balance on this account is usually a credit balance, representing the net amount payable to the government.

When the tax is paid to the government, the accounting treatment is:

Payment of sales tax to the government	Debit	Credit
Sales tax account	X	
Bank account		X

2.3 Note on the sales tax arithmetic

If sales tax is X% of the basic price, and you are given the value of sales or purchases **including** the sales tax, you should calculate the sales price or purchase price **excluding** the sales tax as follows:

$$\text{Price excluding sales tax} = \text{Price including sales tax} \times \frac{100}{(100 + X)}$$

$$\text{Sales tax} = \text{Price including sales tax} \times \frac{X}{(100 + X)}$$



Example

A business is established and immediately registers for sales tax. During its first trading period, its sales excluding sales tax were \$140,000 and its purchases including sales tax were \$60,000. All sales and purchases are on credit. Sales tax is at the rate of 20%. At the end of the period, the business paid to the government all the sales tax payable for the period.

The accounting treatment of these transactions is as follows (in journal entry format):

	Debit	Credit
	\$	\$
Trade receivables	168,000	
Sales		140,000
Sales tax account		28,000
Sales for the period		
Purchases	50,000	
Sales tax account	10,000	
Trade payables		60,000
Purchases for the period		
Sales tax account	18,000	
Bank		18,000
Payment of sales tax to the government		

Note: The sales tax on purchases is $\$60,000 \times 20/120$. Purchases excluding sales tax are $\$60,000 \times 100/120$.

The sales tax account for the period is summarised as follows:

Sales tax account (Sales tax payable/receivable)			
	\$		\$
Trade payables	10,000	Trade receivables	28,000
Bank	18,000		
	28,000		28,000

In practice, there is usually a balance on the sales tax account at the end of an accounting period. It is usually a credit balance, representing the net amount of tax that is currently payable to the government.



Exercise 2

A business has credit sales of \$90,000 plus sales tax of 10%. It has purchases of \$44,000, which include sales tax at 10%. Using T accounts, show how these transactions would be recorded in the main ledger.



Exercise 3

A business has sales of \$179,400, all on credit. These sales include sales tax at 15% of the basic price. In the same period, purchases were \$95,450, including sales tax at 15%, and there were sundry expenses of \$2,000 plus sales tax at 15%. (These sundry expenses have not yet been paid, and should be accounted for as payables.)

Required

Enter these transactions in the accounts in the main ledger.

2.4 Sales tax and discounts

On a sales invoice a customer could be allowed a trade discount which is usually given to long standing wholesale customers. There might also be a settlement discount offered for early payment.

These two types of discount have different effects when calculating the sales tax due.

Trade discount – A trade discount is deducted from list price, so the amount of sales tax payable, shown on the invoice, is calculated on the price after deducting the trade discount.

Settlement discount – A settlement discount is deducted from the amount shown in the invoice deducted from net list price for calculation of sales tax.

When a settlement discount is taken, the amount payable is:

The invoice amount including sales tax	X
Less: The settlement discount	(X)
Less: The sales tax on the settlement discount.	(X)
Amount payable	<u>X</u>

Alternatively, this is:

The invoice amount excluding the sales tax	X
Less: The settlement discount	(X)
Equals: Net amount payable excluding sales tax	<u>X</u>
Plus: The sales tax on this amount	X
Amount payable	<u>X</u>



Example

A business sells goods on credit for a list price of \$100,000. A trade discount of 20% is given and a settlement discount of 4% has been offered for payment within 10 days. Sales tax is at the rate of 17.5%.

The amount shown in the invoice as due from the customer is:

	\$
List price	100,000
Less: trade discount	(20,000)
Net price	80,000
Sales tax (see below)	13,440
Total amount payable	93,440

This is the amount due from the supplier for the goods.

If the discount is taken, the amount payable is calculated as follows:

	\$
Net price	80,000
Less: settlement discount ($4\% \times 80,000$)	(3,200)
	76,800
Sales tax ($17.5\% \times 76,800$)	13,440

More about books of prime entry

- Cash book: recording cash receipts
- Cash book: recording cash payments
- Sales day book
- Purchases day book
- Sales returns day book
- Purchases returns day book

3 More about books of prime entry

As explained earlier, accounting transactions are not recorded directly in the ledgers. Instead they are listed in books of prime entry. Each of these 'books' or 'journals' is used to record different types of transaction.

After recording transactions in books of prime entry, they are transferred (or 'posted') at a later time to the appropriate accounts in:

- the main ledger, and also
- for transactions involving sales to (or sales returns by) credit customers, the receivables ledger
- for transactions involving purchases on credit (or purchase returns), the payables ledger.

3.1 Cash book: recording cash receipts

The cash book is used to record receipts of 'cash' and payments of 'cash'. 'Cash' means money going through the bank account. A simplified example of the **cash receipts side** of the cash book is shown below.

Cash receipts	Total	Receivables	Other receipts	Settlement discounts allowed (memorandum)
	\$	\$	\$	\$
Smith Company	300	300		
K Brown	500	500		
New capital	5,000		5,000	
C Cropper	580	580		20
VB Industries	870	870	-	30
	<u>7,250</u>	<u>2,250</u>	<u>5,000</u>	<u>50</u>

Posting receipts from the cash book to the ledgers

In the example above:

- The total cash received (\$7,250) will be debited to the bank account in the main ledger.

- The total amount of cash received from trade receivables (\$2,250) will be credited to the total trade receivables account in the main ledger.
- The capital of \$5,000 paid into the business will be credited to the Capital account.
- The **cash settlement discounts allowed** (\$50 in the example above) is not a cash item but is included in a memorandum column in the cash book. It should be (1) credited to total trade receivables and (2) debited to discounts allowed (= expense) in the main ledger.
- The cash received from individual customers and the discounts allowed to individual customers will be credited to their individual accounts in the receivables ledger.

3.2 Cash book: recording payments

A simplified example of the cash payments side of the cash book is shown below.

Cash payments	Total	Payables	Other payments	Settlement discounts received (memorandum)
	\$	\$	\$	\$
KPT Supplies	590	590		10
Duck Company	800	800		
Interest paid	600		600	
Drawings	3,000		3,000	
Fast Supplies	2,150	2,150	-	100
	<u>7,140</u>	<u>3,540</u>	<u>3,600</u>	<u>110</u>

Posting payments from the cash book to the ledgers

In this example:

- The total cash paid (\$7,140) will be credited to the bank account in the main ledger.
- The total amount of cash paid for trade payables (\$3,540) will be debited to the total trade payables account in the main ledger.
- The drawings paid out to the owner (\$3,000) will be debited to a drawings account in the main ledger, and the interest paid (\$600) will be debited in the interest expenses account.
- The **cash settlement discounts received** from suppliers (\$110 in the example above) are not a cash item, but discounts received are included in the cash book in a memorandum column. Discounts received are then posted to the main ledger by debiting the total trade payables account and crediting the discounts received account in the main ledger. Discounts received are accounted for as income (or a negative expense).
- The cash paid to individual suppliers and the discounts received from individual suppliers will be debited to their individual accounts in the payables ledger.

3.3 Sales day book

The sales day book is used to make an initial record of sales on credit. Credit sales transactions are entered in the sales day book as a list. From time to time, possibly each day, a total value for the transactions in the list is calculated.

The simple example below shows a sales day book with four credit sales transactions listed.

	\$	
Grapes Company	7,000	These individual transactions will be debited to the individual customer accounts in the receivables ledger
J Mango	3,000	
Pat Plum	500	
Melon Traders	6,600	
	17,100	This total will be posted to the main ledger, by crediting the sales account and debiting the total trade receivables account.

As explained earlier the transactions, having been entered in the sales day book, must be transferred to the ledgers ('posted to' the ledgers). From time to time, possibly each day:

- Each individual transaction is transferred to the receivables ledger and recorded in the account of the individual customer. Debit the account of the customer in the receivables ledger with the value of the transaction.
- The total value of the transactions (since the previous time that entries were posted to the ledger) is transferred as a double entry to the main ledger:
Debit: Trade receivables control account (= total trade receivables account)
Credit: Sales

3.4 Purchases day book

The purchases day book is used to make an initial record of purchases on credit. Purchase transactions on credit are entered in the purchases day book as a list. From time to time, possibly each day, a total value for the transactions in the list is calculated.

The simple example below shows a purchases day book with four purchase transactions listed.

	\$	
Carrot Suppliers	2,000	These individual transactions will be credited to the individual supplier accounts in the payables ledger
B Bean	1,400	
Turnip Company	2,700	
KY Onions	700	
	6,800	This total will be posted to the main ledger, by debiting the purchases account and crediting the total trade payables account.

As explained earlier the transactions, having been entered in the purchases day book, must be transferred to the ledgers ('posted to' the ledgers). From time to time, possibly each day:

- Each individual transaction is transferred to the payables ledger and recorded in the personal account of the supplier.

Credit the account of the supplier in the payables ledger with the value of the transaction.

- The total value of the transactions (since the previous time that entries were posted to the ledger) is transferred as a double entry to the main ledger:

Debit: Purchases

Credit: Trade payables control account (= total trade payables account).

Analysis columns in the day books

A day book might have analysis columns, to make posting transactions to the main ledger easier. An example is shown below, for a purchases day book.

Date		Total value	Purchases	Heating and lighting	Rent	Sundry expenses
		\$	\$	\$	\$	\$
3 May	BV Supplies	500	500			
3 May	South Electric	1,200		1,200		
3 May	CD Properties	3,000			3,000	
3 May	Sad Stationery	650				650
3 May	Woods Widgets	4,800	4,800			
3 May	Small Plastic	3,200	3,200			
3 May	Southern Gas	750		750		
3 May	IT Supplier Company	500				500
		<u>14,600</u>	<u>8,500</u>	<u>1,950</u>	<u>3,000</u>	<u>1,150</u>

Note: The example here excludes **sales tax**. In practice, there will usually be an analysis column in the sales day book and the purchases day book for sales tax, so that the figure for sales or purchases net of tax and the tax amount can be recorded separately (each in a separate analysis column). The total value column will record the total amount of the sale or expense including sales tax.

The analysis columns make it easier to transfer the total value of transactions to the main ledger accounts. In the example above, the transfers would be:

	Debit	Credit
	\$	\$
Debit: Purchases	8,500	
Credit: Trade payables		8,500
Debit: Heating and lighting expenses	1,950	
Credit: Trade payables		1,950
Debit: Rent expenses	3,000	
Credit: Trade payables		3,000
Debit: Sundry expenses	1,150	
Credit: Trade payables		1,150

3.5 Sales returns day book

The sales returns day book is similar to the sales day book, except that it records goods returned by customers, perhaps because they are damaged or of unacceptable quality. When goods are returned, a credit note is issued to the customer.

The sales returns day book records the credit note details. The total sales returns are posted to the main ledger, by:

- debiting the sales returns account
- crediting the total trade receivables account.

Returns for individual customers are also credited in the customer's individual account in the receivables ledger.

3.6 Purchases returns day book

The purchases returns day book is similar to the purchases day book, except that it records goods returned to suppliers. When goods are returned to a supplier, a credit note is received. The purchases returns day book records the credit note details.

The total purchases returns are posted to the main ledger, by:

- debiting the total trade payables account
- crediting the purchases returns account, or possibly the purchases account.

Returns to individual suppliers are also debited in the supplier's individual account in the payables ledger.

Petty cash

- Definition of petty cash
- Recording petty cash transactions

4 Petty cash

4.1 Definition of petty cash

Petty cash is cash (notes and coins) held by a business to pay for small items of expense, in situations where it is more convenient to pay in notes and coin than to pay through the bank account. Petty cash might be used, for example, to pay for bus fares, taxi fares, tea and coffee for the office, and so on.

4.2 Recording petty cash transactions

When petty cash transactions take place, for example petty cash is spent on tea and coffee for the office, the entity needs to record both an expense, and a reduction in the asset "petty cash". These entries are made in the main ledger accounts as follows:

Debit	Expenses (eg office expenses)	X	
	Credit	Petty cash account	X

Although the amounts involved in petty cash are, for most businesses, very small, the "cash in the tin" is one of the easiest assets to be stolen or "lost". Most businesses therefore establish systems of control over petty cash, including petty cash vouchers, periodic surprise cash counts, locked tin or safe, and a numerical amount (the "imprest") whereby at any moment in time, the cash in the tin plus any vouchers equals a fixed amount (say \$100). The operation and accounting for "imprest" and "non-imprest" systems is not examinable in this paper, although the operation will be explained when you study auditing.

Practice multiple choice questions

- 1 The opening balance in the receivables account at the beginning of September is \$74,500. The following transactions occurred during September.

	\$
Sales returns	2,400
Cash received	96,200
Credit sales	94,600
Discounts allowed	1,800

Cash sales 4,000

What was the closing balance on the receivables account at the end of September?

- A** \$68,700
- B** \$72,300
- C** \$72,700
- D** \$73,500

(2 marks)

- 2** A company made purchases totalling \$41,400 in June. This includes sales tax at 15%, which is fully recoverable from the tax authorities. How should the purchases be recorded in the main ledger?

- A** Debit Payables \$36,000, Debit Sales tax \$5,400, Credit Purchases \$41,400
- B** Debit Payables \$41,400, Credit Sales tax \$5,400, Credit Purchases \$36,000
- C** Debit Purchases \$36,000, Debit Sales tax \$5,400, Credit Payables \$41,400
- D** Debit Purchases \$41,400, Credit Sales tax \$5,400, Credit Payables \$36,000

(1 mark)

- 3** A company made a credit sale of \$15,000 to a customer and offered a discount of 5% if the customer paid within seven days. The customer took the discount and paid within this time. How should the payment transaction be recorded?

- A** Debit Receivables \$14,250, Debit Discounts allowed \$750, Credit Sales \$15,000
- B** Debit Receivables \$15,000, Credit Discounts allowed \$750, Credit Sales \$14,250
- C** Debit Cash \$14,250, Debit Discounts allowed \$750, Credit Receivables \$15,000
- D** Debit Cash \$15,000, Credit Discounts allowed \$750, Credit Receivables \$14,250

(1 mark)

Data for questions 4 and 5

Lee is a sole trader who does not keep full accounting records. The following details relate to his transactions with credit customers and suppliers for the year ended 31 March 2010:

	\$
Trade receivables, 1 April 2009	104,000
Trade payables, 1 April 2009	54,000
Cash received from customers	735,000
Cash paid to suppliers	328,000
Discounts allowed	12,000
Discounts received	2,000
Contra between payables and receivables ledgers	3,000
Trade receivables, 31 March 2010	146,000
Trade payables, 31 March 2010	77,000

- 4** What figure should appear in Lee's income statement for the year ended 31 March 2010 for purchases?
- A** \$300,000
 - B** \$350,000
 - C** \$352,000
 - D** \$356,000
- (2 marks)**
- 5** What figure should appear in Lee's income statement for the year ended 31 March 2010 for sales, assuming that all sales are on credit?
- A** \$678,000
 - B** \$768,000
 - C** \$786,000
 - D** \$792,000
- (2 marks)**
- 6** Custer sells goods on credit to Bull. Bull receives a trade discount of 10% on the list price of goods from Custer. In addition, Custer offers a 5% settlement discount for payment within 7 days of the invoice date. Bull bought goods from Custer with a list price of \$400,000. Sales tax is at 15%.
- What amount should be included in Custer's receivables ledger for this transaction?
- A** \$460,000
 - B** \$393,300
 - C** \$411,300
 - D** \$414,000
- (2 marks)**

Inventory

Contents

- | | |
|---|--|
| 1 | End-of-year adjustments for inventory |
| 2 | Valuation of inventory |
| 3 | FIFO and weighted average cost methods |

End-of-year adjustments for inventory

- The need for end-of-year adjustments
- Opening and closing inventory and the cost of sales
- Recording opening and closing inventory
- Period-end method: accounting procedures
- Continuous inventory method: accounting procedures
- Transactions between the year-end and the inventory count

1 End-of-year adjustments for inventory

1.1 The need for end-of-year adjustments

At the end of a financial period ('end of year') a business calculates the profit or loss it has made for the year, and produces a statement of financial position as at the end of the year.

- The items of income and expenses are transferred to the income statement to calculate the profit or loss for the financial period.
- The assets, liabilities and capital are set out in the statement of financial position. The profit for the year is added to capital, or the loss is subtracted from capital.

However, certain adjustments must be made to income, expenses, assets and liabilities, in order to apply the accruals basis to accounting, and the prudence concept to the valuation of receivables. These adjustments are made at the end of the financial year, because they are not concerned with regular accounting transactions that arise in the normal course of business operations. They are not needed until it is time to prepare the financial statements for the year.

Adjustments are needed for:

- opening and closing inventory
- accrued expenses and prepaid expenses
- bad and doubtful debts
- non-current assets and depreciation.

Having made the adjustments, an income statement and statement of financial position can be prepared. This section explains the end-of-year adjustments for inventory.

1.2 Opening and closing inventory and the cost of sales

In an income statement, the gross profit for a period = Sales – Cost of sales. The accruals concept is applied, and sales are matched with the cost of making those sales in order to calculate gross profit. However costs of purchases during a period are not the same as the cost of sales, because of changes in inventory levels.

The Cost of sales = Opening inventory + Purchases – Closing inventory.

	\$
Sales	
Opening inventory	A
Purchases	B
	<u>A + B</u>
Closing inventory	(C)
Cost of sales	<u>A + B - C</u>

The cost of sales is shown in an income statement, and is used to calculate the gross profit (or loss) earned during an accounting period.



Example

Here is an illustrative example.

	\$	\$
Sales		183,000
Opening inventory	15,000	
Purchases	<u>100,000</u>	
	115,000	
Closing inventory	<u>(20,000)</u>	
Cost of sales		<u>(95,000)</u>
Gross profit		88,000
Other expenses		<u>(80,000)</u>
Net profit (or loss) for the period		<u>8,000</u>

1.3 Recording opening and closing inventory

In order to prepare an income statement, it is therefore necessary to obtain values for opening inventory and closing inventory, and to record these in the accounting system. There are two main methods of recording inventory, a continuous inventory system and a period-end system.

There is a ledger account (in the main ledger) for inventory. However, inventory can be accounted for in the ledger in either of two ways, depending on which method of recording of inventory is used.

- In a **continuous inventory system**, all movements of inventory are recorded in the inventory account. This includes all purchases and all issues of inventory. This means that all transactions involving the receipt or issue of inventory must be recorded, and at any time, the balance on the inventory account should be the value of inventory currently held. This type of inventory system is time-consuming, and is not normally used by small businesses.
- The second method of accounting for inventory is the **period-end method**. In simple accounting systems such as the accounts of sole traders, it is usual to have a purchases account to record purchases from suppliers. The inventory account in the main ledger is used only to record the value of inventory at the

beginning/end of the financial year. In the period-end method, the value of inventory is established only once in each financial year, at the end of the year.

For your examination, a question on year-end adjustments for inventories will normally require you to use the period-end system of accounting.

1.4 Period-end method: accounting procedures

In a period-end system, inventory is normally valued just once each year, at the end of the financial year. The value of inventory at the end of one year (i.e. closing inventory) becomes the opening inventory at the beginning of the next year.

Until the end of the year, the balance on the inventory account (a debit balance) is the value of opening inventory at the beginning of the year.

At the end of the financial year, the closing inventory is counted and valued. The opening inventory value is replaced in the inventory account by the value of closing inventory, in the way described below.

The appropriate book-keeping entries in the main ledger are as follows:

For the opening inventory

- Credit the inventory account with the value of the opening inventory
- Debit the income statement with the value of the opening inventory.

The income statement (as well as the inventory account) is an account in the main ledger, and is part of the double entry book-keeping system.

For the closing inventory

- Debit the inventory account with the value of the closing inventory
- Credit the income statement with the value of the closing inventory.

The closing balance on the inventory account is therefore the value of the closing inventory, which is carried forward as the opening balance at the beginning of the next period.

The end-of-year adjustments for inventory are shown in the T account below.

Inventory account			
Current year			
	\$		\$
Opening inventory b/f	A	Income statement	A
Income statement	B	Closing inventory c/f	B
	<u>A + B</u>		<u>A + B</u>
Next year			
Opening inventory b/f	B		

In a period-end system, all purchases from suppliers are recorded in a Purchases account: Debit Purchases, Credit Trade payables.



Example

In Year 2, Bubbles had opening inventory of \$10,000. Sales during the year were \$80,000 and purchases were \$30,000. Closing inventory at the end of Year 2 was \$12,000. The entries in the main ledger of Bubbles can be summarised as follows:

Sales account			
	\$		\$
Income statement	80,000	Receivables	80,000
Purchases account			
	\$		\$
Trade payables	30,000	Income statement	30,000
Inventory account			
	\$		\$
Opening balance b/f	10,000	Income statement	10,000
Income statement	12,000	Closing balance c/f	12,000
	<u>22,000</u>		<u>22,000</u>
Opening balance b/f	12,000		
Income statement			
	\$		\$
Opening inventory	10,000	Sales	80,000
Purchases	30,000	Closing inventory	12,000
Gross profit c/d	52,000		
	<u>92,000</u>		<u>92,000</u>
		Gross profit b/d	52,000

This part of the income statement can be presented as a report, in vertical format, as follows:

	\$	\$
Sales		80,000
Opening inventory	10,000	
Purchases	30,000	
	<u>40,000</u>	
Closing inventory	<u>(12,000)</u>	
Cost of sales		<u>(28,000)</u>
Gross profit		52,000

If you have difficulty remembering the double entry rules for the opening and closing inventory adjustments, it might be helpful to remember the following points.

- In a period-end system of accounting for inventory, the double entries are between the inventory account and the income statement.

- The cost of opening inventory is included in the cost of sales. It is an expense, and expenses are a debit entry. So debit the income statement (and credit the inventory account) with the cost of the opening inventory.
- The cost of closing inventory is included in the statement of financial position as an asset, so there must be a debit balance for the closing inventory. So debit Inventory (and credit Income statement) with the valuation of the closing inventory.



Exercise 1

The following trial balance has been extracted from the ledger of Prepp at 30 June Year 3.

	Debit	Credit
	\$000	\$000
Salaries	10,500	
Drawings	3,000	
Lighting and heating	500	
Sales		30,000
Trade receivables	10,000	
Rent	2,000	
Office expenses	1,000	
Capital at 1 July Year 2		27,500
Purchases	14,000	
Inventory at 1 July Year 2	2,000	
Trade payables		4,000
Property, plant and machinery	17,500	
Cash	1,000	
	<u>61,500</u>	<u>61,500</u>

Closing inventory at 30 June Year 3 has been valued at \$1,500,000.

Required

Ignoring accrued and prepaid expenses, doubtful debts and non-current asset depreciation, prepare the income statement for the year to 30 June Year 3 and the statement of financial position as at that date.

1.5 Continuous inventory method: accounting procedures

When the continuous inventory method is used, a record is kept of all receipts of items into inventory (at cost) and all issues of inventory to cost of sales. Each issue of inventory is given a cost, and the cost of the items issued is either the actual cost of the inventory (if it is practicable to establish the actual cost) or a cost obtained using a valuation method such as FIFO or AVCO, which are described later.

Each receipt and issue of inventory is recorded in the inventory account. This means that a purchases account becomes unnecessary, because all purchases are recorded in the inventory account.

Debit: Inventory

Credit: Trade payables

The balance on the inventory account is an asset, but the account also records expenses (purchases).

Inventory account (continuous inventory system)

	\$		\$
Opening balance b/f	8,000	Cost of sales	79,000
Purchases	84,000	Purchase returns	1,000
	<u>92,000</u>	Closing balance c/f	<u>12,000</u>
			<u>92,000</u>
Opening balance b/f	12,000		

1.6 Transactions between the year-end and the inventory count

To establish a 'correct' valuation for closing inventory, it might be necessary to have an end-of-year inventory count. An inventory count is essential when a period-end inventory accounting system is used. An inventory count is a physical count of the inventory items held at the end of the financial year.

However, for practical reasons it is usually impossible to conduct the inventory count on the last day of the financial year. In many cases, the inventory count takes place on a day soon before the end of the year, and no further transactions are allowed to occur until the new financial year begins.

Sometimes, the annual inventory count might not take place until a few days after the end of the financial year. When this happens, there might be some transactions in the new financial year, between the end of the previous financial year and the date of the inventory count.

The inventory valuation obtained from the inventory count must therefore be adjusted to remove the transactions in the new financial year, in order to obtain a valuation for inventory as at the end of the previous year.



Example

A business entity has a financial year ending 31 December 2009. An inventory count on 5 January gave a total inventory value of \$94,300 as at that date. However between 31 December 2009 and 5 January 2010, the following transactions occurred:

	\$
Purchases of goods	8,000
Sales of goods from inventory (profit margin = 40% on sales price)	30,000
Goods returned to supplier	2,000

To prepare the financial statements for the year to 31 December we must adjust the inventory valuation on 5 January to remove the effect of the transactions that occurred since 31 December. To do this we must:

- add back inventory that has been sold since the end of the year, **at cost**
- add back inventory that has been returned to suppliers since the end of the year
- deduct the cost of inventory purchased and received into inventory since the end of the year

In this example, the cost of inventory at 31 December is calculated as follows:

	\$
Inventory at 5 January	94,300
Less: Purchases of goods since 31 December	(8,000)
Add back:	
Sales of goods from inventory at cost ($40\% \times \$30,000$) since 31 Dec	12,000
Goods returned to supplier since 31 December	2,000
Inventory at 31 December	<u>100,300</u>

Valuation of inventory

- The requirements for valuation of inventory
- Measurement of inventory: lower of cost or net realisable value
- The cost of inventories
- Carriage inwards and carriage outwards
- Cost formulas for inventory
- Disclosures of accounting policies for inventory
- Inventory and drawings by the business owner

2 Valuation of inventory

2.1 The requirements for valuation of inventory

The valuation of inventory can be extremely important for financial reporting, because the valuations affect both the cost of sales (and profit) and also total asset values in the statement of financial position.

There are several aspects of inventory valuation to consider:

- Should the inventory be valued at cost, or might a different valuation be more appropriate?
- Which items of expense can be included in the cost of inventory?
- What valuation method should be used when it is not practicable to identify the actual cost of inventory?

Rules for dealing with each of these problems are provided by the international accounting standard IAS 2 **Inventories**.

2.2 Measurement of inventory: lower of cost or net realisable value

The discussion of inventory so far has assumed that inventory consists of items purchased from suppliers and then re-sold. The nature of inventories in reality varies with the type of business. Inventories might include:

- goods purchased and held for resale
- finished goods produced
- work in progress being produced
- raw materials and components.

It is a requirement of IAS 2 **Inventories** that inventory must be measured in the financial statements at the **lower** of:

- cost, or
- net realisable value (NRV).

This is an example of the accounting concept of prudence.

When the cost of inventory exceeds its net realisable value, it is **written down in value** to net realisable value. The amount of the 'write-off' (i.e. reduction in inventory value) is treated as an expense in the period and charged against profit.

Net realisable value

Net realisable value is the amount that can be obtained from disposing of the inventory in the normal course of business, less any further costs that will be incurred in getting it ready for sale or disposal.

- Net realisable value is usually higher than cost. Inventory is therefore usually valued at cost.
- However, when inventory loses value, perhaps because it has been damaged or is now obsolete, net realisable value will be lower than cost.

The cost and net realisable value should be compared for each separately-identifiable item of inventory, or group of similar inventories, rather than for inventory in total.

Note: IAS 2 uses the term 'measurement' of inventory. You may prefer to think of this as a 'valuation' of inventory. 'Measurement' here means expressing inventory as a monetary amount.



Example

In Year 2, A business has four items of inventory. A count of the inventory has established that the amounts of inventory currently held, at cost, are as follows:

	\$
Inventory item A1	8,000
Inventory item A2	14,000
Inventory item B1	16,000
Inventory item C1	6,000

Inventory items A1 and C1 are no longer used in normal business operations, due to a major change in business strategy. The inventory of item A1 could be disposed of for \$7,800 less selling costs of \$500. The inventory of item C1 could be disposed of for \$7,000 less selling costs of \$200.

Required

What should be the value for inventory in the statement of financial position?

**Answer**

Item	Lower of cost or net realisable value	Balance sheet value
		\$
A1	8,000 or (7,800 – 500)	7,300
A2		14,000
B1		16,000
C1	6,000 or (7,000 – 200)	6,000
Inventory valuation in the balance sheet		<u>43,300</u>

The reduction in the value of item A1 from \$8,000 cost to \$7,300 net realisable value results in a write-off of \$700 in the value of inventory. This is treated as an expense in the accounting period when the reduction in value occurs.

Lower of cost and NRV: events after the end of the accounting period

Inventory must be valued at the lower of cost and net realisable value, but it might not become apparent that NRV is less than cost until after the end of the financial period.

For example, suppose that a company has 100 units of an item at the end of the accounting period on 31 December Year 1, and these units have a cost of \$20 each or \$2,000 in total. The units might be sold in January Year 2, but only for \$15 each net of selling expenses. If the company has not yet published its financial statements for Year 1, it should amend the value of the inventory value as at 31 December. Since the units were sold for only \$15 in January, it is clear that their net realisable value at 31 December was only \$15, even though this only became apparent later.

The inventory at 31 December Year 1 should therefore be stated at net realisable value, \$1,500, and the write-off of \$500 should be included as an expense in profit and loss for Year 1.

2.3 The cost of inventories

IAS2 states that ‘the cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Purchase cost

The **purchase cost** of inventory will consist of the following:

- the purchase price
- plus import duties and other non-recoverable taxes (but excluding recoverable sales tax)
- plus transport, handling and other costs directly attributable to the purchase (carriage inwards), if these costs are additional to the purchase price.

The purchase price **excludes** any trade discounts, and is the cost after deduction of trade discount.

Conversion costs

When materials purchased from suppliers are converted into another product in a manufacturing or assembly operation, there are also conversion costs to add to the purchase costs of the materials. Conversion costs must be included in the cost of finished goods and unfinished work in progress.

Conversion costs consist of:

- costs directly related to units of production, such as costs of direct labour (i.e. the cost of the labour employed to perform the conversion work)
- fixed and variable **production** overheads, which must be allocated to costs of items produced and closing inventories. (Fixed production overheads must be allocated to costs of finished output and closing inventories on the basis of the **normal production capacity** in the period)
- other costs incurred in bringing the inventories to their present location and condition.

If you have not yet studied cost and management accounting, you need to be aware of some of the costs that are included in production overheads (also known as factory overheads). Production overheads include:

- costs of indirect labour, including the salaries of the factory manager and factory supervisors
- depreciation costs of non-current assets used in production
- costs of carriage inwards, if these are not included in the purchase costs of the materials

Other costs

Other costs can be included in the cost of inventories only to the extent that they are incurred in bringing the inventory to its present location and condition. Costs that should **not** be included in the cost of inventories include:

- Abnormal amounts of wasted materials
- Storage costs
- Administrative overheads
- Costs of selling the inventory.

Only production overheads are included in costs of finished goods inventories and work-in-progress. Administrative costs and selling and distribution costs must not be included in the cost of inventory.

2.4 Carriage inwards and carriage outwards

Two expenses that you might come across are carriage inwards and carriage outwards. Even though they are both expenses they are reported differently in the income statement.

Carriage inwards

This is the cost a business might incur in getting its purchases delivered to its business premises. Sometimes the supplier may pay any delivery costs but if the business has to pay its own delivery costs it records these costs as carriage inwards. The double entry is:

Debit	Carriage inwards
Credit	Bank

Cost of carriage inwards is part of the cost of bringing the inventory to its current location and condition. The cost is usually added to the purchase cost of the goods and so this cost is included in the cost of sales and the calculation of gross profit.

Carriage outwards

Carriage outwards is the cost of delivering goods to customers. This is a normal selling expense, which is treated as an expense in the income statement. The cost of carriage outwards is not included in the cost of inventory or cost of sales and so does not affect gross profit (only net profit).

2.5 Cost formulas for inventory

With some inventory items, particularly large and expensive items, it might be possible to recognise the actual cost of each item. In practice, however, this is unusual because the task of identifying the actual cost for all inventory items would be too time-consuming and complex. A system is therefore needed for measuring the cost of inventory.

The historical cost of inventory is usually measured by one of the following methods:

- First in, first out (FIFO)
- Weighted average cost (AVCO)

Another method of measuring cost is last in, first out (LIFO), but this is not permitted by international accounting standard IAS 2, for the purpose of financial statements.

FIFO and AVCO are explained in the next section.

The retail method

IAS2 **Inventories** allows certain techniques for the measurement of cost in certain circumstances. In particular it states that the retail method is often used in the retail industry to establish cost. Retailing businesses have large inventories of rapidly-changing items, for which the profit margin is similar, and it is often impractical to use any other costing method except for the retail method.

In the retail method, the cost of inventory is determined by taking the selling price of the inventory items and reducing the selling price to take out the appropriate percentage gross profit margin. For example if a retail store sells goods at cost plus 50%, and has inventories at the year-end with a sales value of \$600,000, the cost of its closing inventories can be measured as $\$600,000 \times (100/150) = \$400,000$.

2.6 Disclosures of accounting policies for inventory

IAS2 Inventories requires that the financial statements should disclose the accounting policies used by the entity for inventory valuation, including the cost formula used.

2.7 Inventory and drawings by the business owner

The owner of a sole trader business might decide to take some inventory for his or her personal use. For example, the owner of a local shop might take some of the goods bought for the shop and use them for personal consumption.

When this happens, it is important that the financial statements of the sole trader should provide a faithful representation of the financial performance of the business. In order to achieve this objective:

- Drawings by the business owner in the form of inventory should be accounted for as drawings (withdrawals of capital).
- The cost of sales should exclude the items taken by the owner as drawings.

Drawings of inventory might be common in small sole trader businesses, but are less common in bigger business entities, where stricter controls over inventory might be considered necessary. Small businesses normally use the period-end inventory system, and when the owner takes some inventory for personal use, the appropriate accounting entry in the main ledger is:

Debit: Drawings
Credit: Purchases

The inventory taken by the owner is valued at cost (not selling price).

This accounting adjustment therefore reduces the total cost of purchases, so that the cost of sales will exclude the cost of the inventory taken.

(If a continuous inventory system is used, the appropriate accounting entry would be Debit Drawings, Credit Inventory.)

FIFO and weighted average cost methods

- First-in, first-out method of valuation (FIFO)
- Weighted average cost (AVCO) method
- Materials valuation methods and inflation

3 FIFO and weighted average cost methods

3.1 First-in, first-out method of valuation (FIFO)

The FIFO and weighted average cost (AVCO) methods of inventory valuation are used within continuous inventory systems. They can also be used to establish a cost for closing inventory with the period-end inventory system.

With the first-in, first-out method of inventory valuation, it is assumed that inventory is consumed in the strict order in which it was purchased or manufactured. The first items that are received into inventory are the first items that go out.

To establish the cost of inventory using FIFO, it is necessary to keep a record of:

- the date that units of inventory are received into inventory, the number of units received and their purchase price (or manufacturing cost)
- the date that units are issued from inventory and the number of units issued.

With this information, it is possible to put a cost to the inventory that is issued (sold or used) and to identify the cost of the items still remaining in inventory.

Since it is assumed that the first items received into inventory are the first units that are used, it follows that **the value of inventory at any time should be the cost of the most recently-acquired units of inventory.**



Example

On 1 October, a company had 100 units in store of a material whose code item is 2345. These units have a cost of \$5 each. During October, it made the following purchases, totalling \$6,900:

- 4 October: 300 units at \$6 each
- 12 October: 500 units at \$7 each
- 22 October: 200 units at \$8 each.

During the month, there were four issues of materials, each of 200 units, on 7 October, 16 October, 23 October and 30 October.

Required

- (a) What was the cost of the material issued from store in October, using the FIFO valuation method?
- (b) What was the value of the closing inventory on 31 October?

a**Answer**

Date	Quantity	Inventory value	Issued	Comments
	Units	\$	\$	
1 Oct	100	500		Opening inventory, 100 at \$5
4 Oct purchase	300	1,800		300 at \$6
	400	2,300		100 at \$5, 300 at \$6
7 Oct issue	(200)	(1,100)	1,100	100 at \$5, 100 at \$6
	200	1,200		200 at \$6
12 Oct purchase	500	3,500		500 at \$7
	700	4,700		200 at \$6, 500 at \$7
16 Oct issue	(200)	(1,200)	1,200	200 at \$6
	500	3,500		500 at \$7
22 Oct purchase	200	1,600		200 at \$8
	700	5,100		500 at \$7, 200 at \$8
23 Oct issue	(200)	(1,400)	1,400	200 at \$7
	500	3,700		300 at \$7, 200 at \$8
30 Oct issue	(200)	(1,400)	1,400	200 at \$7
31 Oct closing	300	2,300		100 at \$7, 200 at \$8
Total cost of issues in October			5,100	

Note:

	\$
Value of opening inventory, 1 October	500
Purchases in the period	6,900
	7,400
Value of closing inventory, 31 October	(2,300)
Cost of materials issued in October	5,100

3.2 Weighted average cost (AVCO) method

With the weighted average cost (AVCO) method of inventory valuation it is assumed that all units are issued at the current weighted average cost per unit.

The normal method of measuring average cost is the **continuous basis method**. With the continuous basis AVCO method, a new average cost is calculated whenever more items are purchased and received into store. The weighted average cost is calculated as follows:

$$\frac{\text{Cost of inventory currently in store} + \text{Cost of new items received}}{\text{Number of units currently in store} + \text{Number of new units received}}$$

Items 'currently in store' are the items in store immediately before the new delivery is received.

e

Example

On 1 October, a company had 100 units in store of a material whose code item is 2345. These units have a cost of \$5 each. During October, it made the following purchases, totalling \$6,900:

- 4 October: 300 units at \$6 each
- 12 October: 500 units at \$7 each
- 22 October: 200 units at \$8 each.

During the month, there were four issues of materials, each of 200 units, on 7 October, 16 October, 23 October and 30 October.

Required

- (a) What was the cost of the material issued from store in October, using the weighted average cost (AVCO) valuation method?
- (b) What was the value of the closing inventory on 31 October?

Remember that with the normal AVCO method, a new weighted average cost is calculated whenever there is a new receipt of inventory items into store.

a

Answer

Date	Quantity	Inventory value	Issued	Comments
	Units	\$	\$	
1 Oct	100	500		Opening inventory, 100 at \$5
4 Oct purchase	300	1,800		New purchases: calculate a new average cost
	<u>400</u>	<u>2,300</u>		Average cost = $\$2,300/400 = \5.75
7 Oct issue	(200)	(1,150)	1,150	200 at \$5.75
	<u>200</u>	<u>1,150</u>		200 at \$5.75
12 Oct purchase	500	3,500		New purchases: calculate a new average cost
	<u>700</u>	<u>4,650</u>		Average cost = $\$4,650/700 = \6.64
16 Oct issue	(200)	(1,328)	1,328	200 at \$6.64
	<u>500</u>	<u>3,322</u>		500 at \$6.64
22 Oct purchase	200	1,600		New purchases: calculate a new average cost
	<u>700</u>	<u>4,922</u>		700 at \$7.03
23 Oct issue	(200)	(1,406)	1,406	200 at \$7.03
	<u>500</u>	<u>3,516</u>		500 at \$7.03
30 Oct issue	(200)	(1,406)	1,406	200 at \$7.03
31 Oct (closing)	<u>300</u>	<u>2,110</u>		300 at \$7.03
Total cost of issues in October			<u>5,290</u>	

Note:

	\$
Value of opening inventory, 1 October	500
Purchases in the period	6,900
	7,400
Value of closing inventory, 31 October	(2,110)
Cost of materials issued in October	5,290

Periodic weighted average cost

Instead of calculating average cost using the continuous basis method, it is possible to calculate a periodic weighted average cost. This might be used when the business entity has a period-end inventory system. It cannot be used for continuous inventory systems, because it relies on calculating just one weighted average cost for each financial period, at the end of the period.

With the periodic weighted average cost system, the same weighted average cost is calculated for all issues from store (i.e. the cost of sales) and all units of closing inventory.

The periodic weighted average is calculated as follows:

$$\frac{\text{Cost of opening inventory} + \text{Cost of all purchases in the period}}{\text{Units of opening inventory} + \text{Units purchased in the period}}$$

3.3 Materials valuation methods and inflation

As a general rule, the two methods of inventory valuation shown here will give significantly different valuations for the cost of sales and the value of closing inventory during a period of high inflation.

With FIFO during a period of high inflation, the cost of sales will be lower than the current replacement cost of materials used. The closing inventory value should be close to current value, since they will be the units bought most recently ('last').

In the example used above to illustrate FIFO and AVCO, the valuations of the cost of goods issued and closing inventory were as follows:

Valuation method	Cost of goods issued	Closing inventory
	\$	\$
FIFO	5,100	2,300
AVCO	5,290	2,110

The cost of goods issued is lowest using FIFO. The valuation of closing inventory is highest with FIFO. This is typical during a period when prices are rising steadily.

Practice multiple choice questions

- 1** The following data relates to the business of Hunter for the year ended 31 December 2009.

	\$
Inventory at 1 January 2009	42,700
Inventory at 31 December 2009	48,300
Purchases	279,600
Purchase returns	3,400
Discounts received	2,100

What was the cost of sales for the year to 31 December 2009?

- A** \$268,500
- B** \$270,600
- C** \$274,000
- D** \$279,700

(2 marks)

- 2** The following data relates to the business of Box for the year ended 31 December 2009.

	\$
Inventory at 31 December 2009	28,700
Inventory at 1 January 2009	35,400
Purchases	225,500
Inventory taken by owner for personal use, at cost	8,000
This inventory taken by the owner had a sales value of \$15,000.	

What was the cost of sales for the year to 31 December 2009?

- A** \$203,800
- B** \$210,800
- C** \$217,200
- D** \$224,200

(1 mark)

- 3** A business had an opening inventory of \$54,000 and a closing inventory of \$60,000 in its financial statements for the year ended 31 March 2010.

Which of the following entries for the opening and closing inventory figures are made as year-end adjustments for inventory?

	Dr	Cr
	\$	\$
A Purchases account	6,000	
Inventory account		6,000
B Income statement	54,000	
Inventory account		54,000
Inventory account	60,000	
Income statement		60,000

C	Inventory account	54,000	
	Income statement		54,000
	Income statement	60,000	
	Inventory account		60,000
D	Inventory account	6,000	
	Purchases account		6,000

(2 marks)

4 Which of the following statements about inventory valuation are correct, for the purpose of financial reporting?

- 1 A company's financial statements must disclose the accounting policies that have been used for inventory valuation, including the cost formula used.
- 2 The valuation of work in progress must include some fixed and variable production overhead cost.
- 3 It might be acceptable for inventory to be valued at selling price minus gross profit margin.
- 4 Inventory should be valued at the lowest of cost, net realisable value and replacement cost.

A All four statements are correct

B 1, 2 and 3 only are correct

C 1, 3 and 4 only are correct

D 2 and 4 only are correct

(2 marks)

5 At 1 January 2009, a business had 600 units of an inventory item, each costing \$120. During the year to 31 December 2009, the following purchases and sales of this inventory item occurred.

15 February: Purchased 300 units at \$130 each

16 April: Sold 200 units for \$40,000

20 July: Purchased 400 units at \$140 each

1 November: Sold 350 units for \$70,000.

The business uses the FIFO method of inventory valuation.

What was the value of closing inventory for this item at 31 December 2009?

A \$90,000

B \$92,000

C \$99,500

D \$101,000

(2 marks)

- 6** At 1 April 2009, a business had 200 units of an inventory item, each costing \$80. During the year to 31 March 2010, the following purchases and sales of this inventory item occurred.

20 May 2009: Purchased 400 units at \$83 each

8 July 2009: Sold 300 units

17 January 2010: Purchased 200 units at \$87 each

3 March 2010: Sold 200 units.

The business uses the average cost method of inventory valuation, on a continuous basis.

What was the value of closing inventory for this item at 31 March 2010?

A \$25,200

B \$21,825

C \$24,800

D \$25,500

(2 marks)

Non-current assets

Contents	
1	Non-current assets: definition and cost
2	Depreciation and net book value (carrying amount)
3	Methods of charging depreciation
4	Acquisition and disposal of non-current assets
5	Revaluation of non-current assets
6	IAS 16 Property, plant and equipment
7	Intangible assets
8	Research and development expenditure

Non-current assets: definition and cost

- Definition of non-current assets: tangible and intangible assets
- The cost of non-current assets
- Capital and revenue items: capital and revenue expenditure
- Depreciation and non-current assets

1 Non-current assets: definition and cost

1.1 Definition of non-current assets: tangible and intangible assets

The accounting treatment of non-current assets is governed by IAS 16 *Property, plant and equipment*, and IAS 38 *Intangible Assets*. The detailed requirements of IAS 16 and IAS 38 will be considered further in a later section.

A **non-current asset** is an asset acquired by a business at a cost, and which will be used by the business over a period of time (in excess of one year) to assist the business to carry out its operations. Non-current assets are not held for re-sale in the normal course of trading. IAS16 defines property, plant and equipment as tangible assets that are:

- used for the production or supply of goods or services, for rental to others or for administrative purposes, and
- expected to have a useful life that covers more than one accounting period.

Non-current assets may be:

- **Tangible.** These are physical assets, such as land and buildings, plant and equipment, and motor vehicles.
- **Intangible.** These do not have a physical existence. Examples are the cost of purchasing patent rights and **goodwill**.

In contrast to non-current assets, **current assets** are cash and money in the bank, or assets that will soon be converted into money in the normal course of trading. Examples of current assets are inventory, receivables, short-term investments, bank balances and cash.

Current assets and non-current assets

Note: IAS 1 defines current assets and then states that all other assets should be classified as non-current assets. A current asset is an asset that:

- is expected to be used or sold or 'realised' in the entity's normal operating cycle, or
- is held primarily for the purpose of being traded, or
- is expected to be realised within 12 months of the balance sheet date, or
- is cash (or a cash equivalent).

1.2 The cost of non-current assets

Non-current assets are **initially recorded** in the accounts of a business **at their cost**. The cost of an item of property, plant and machinery consists of:

- its purchase price after any trade discount has been deducted, plus any import taxes or *non-refundable* sales tax
- the directly attributable costs of 'bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management' (IAS 16 **Property, plant and machinery**). These directly attributable costs may include:
 - employee costs arising directly from the installation or construction of the asset
 - the cost of site preparation
 - delivery costs ('carriage inwards')
 - installation and assembly costs
 - testing costs
 - professional fees directly attributable to the purchase.
- When the entity has an obligation to dismantle and remove the asset at the end of its life, its initial cost should also include an estimate of the costs of dismantling and removing the asset and restoring the site where it is located.

The cost of a non-current asset cannot include any administration costs or other general overhead costs.

The definition of 'cost' for non-current assets has close similarities with the cost of inventories, although non-current assets will often include more items of 'other expense' within cost. For example when a business entity acquires a new building the cost of the building might include professional fees such as the fees for an architect and surveyor. Another accounting standard, IAS23 **Borrowing costs**, deals with whether interest costs on borrowing to finance the construction of a non-current asset should be included in the cost of the asset.

1.3 Capital and revenue items: capital and revenue expenditure

The difference between capital and revenue items, and between capital and revenue expenditure was explained in an earlier chapter.

- Non-current assets are capital assets.
- Spending to acquire non-current assets is capital expenditure. Capital expenditure either creates a new non-current asset or adds to the cost of a non-current asset.
- Expenditure on a non-current asset after acquisition can be added to the cost of the asset provided that it improves the condition of the asset above its original level. An example is expenditure on constructing an extension to a building: the cost of the extension is capital expenditure and is included in the cost of the non-current asset.

Maintenance and repair costs: revenue expenditure

Expenditures on non-current assets after their acquisition are usually maintenance and repair costs. These are expenses (= running costs) and so are included in the income statement as expenses for the period in which they are incurred. These are items of revenue expenditure, not capital expenditure.

1.4 Depreciation and non-current assets

Although capital expenditure creates non-current assets and is not revenue expenditure, there are annual charges against profit for non-current assets, in the form of depreciation or amortisation. Most non-current assets must be depreciated or amortised.

Depreciation and amortisation are expenses in the income statement. Depreciation relates to tangible non-current assets and amortisation relates to intangible non-current assets.

Depreciation charges for non-current assets are normally calculated at the end of the accounting period, which means that accounting for depreciation takes the form of end-of-year adjustments.

Depreciation and net book value (carrying amount)

- Depreciation: definition
- Net book value (carrying amount)
- Accounting for depreciation

2 Depreciation and net book value (carrying amount)

2.1 Depreciation: definition

A useful simplified explanation of depreciation is that it is a method of spreading the cost of a non-current asset over its expected useful life (economic life), so that an appropriate portion of the cost is charged in each accounting period.

IAS 16 *Property, Plant and Equipment* defines depreciation more specifically as ‘the systematic allocation of the depreciable amount of an asset over its useful life’

- ‘Depreciable amount’ is the cost of an asset (or its revalued amount, in cases where a non-current asset is revalued during its life) less its residual value.
- ‘Residual value’ is the expected disposal value of the asset (after deducting disposal costs) at the end of its expected useful life.
- ‘Useful life’ is the period over which the asset is expected to be used by the business entity.

For example, suppose that an item of equipment cost \$30,000 and has a residual value of \$5,000 at the end of its expected useful life of four years. Depreciation is a way of allocating the depreciable amount of \$25,000 (= \$30,000 - \$5,000) over the four years of the asset’s expected life.

Depreciation should be charged as an expense in the income statement each year over the life of the asset.

(The value of a non-current asset can be consumed in other ways. For example, a non-current asset might lose value due to deterioration or obsolescence. Loss in value due to deterioration or obsolescence should also be charged in the income statement, but ‘impairment losses’ of this kind are not in the syllabus for the examination.)

Most non-current assets must be depreciated or amortised, although there are some exceptions to this rule. For example, **land is not depreciated**. Similarly, purchased goodwill, an intangible non-current asset, is not depreciated.

2.2 Net book value (carrying amount)

Over time, a non-current asset loses value as depreciation is charged each year. The total amount of depreciation charged on a non-current asset since it was acquired (or re-valued) is the **accumulated depreciation** for the asset.

Net book value is the cost of the non-current asset less its accumulated depreciation

	\$
Non-current asset at cost (or valuation)	X
Less accumulated depreciation	(X)
Net book value	X

The net book value of non-current assets is an item in the statement of financial position. It is the **carrying amount** of the asset. ('Carrying amount' means the amount at which a non-current asset is 'carried' or shown in the statement of financial position.)

2.3 Accounting for depreciation

Each year, there is an annual charge in the income statement for depreciation of non-current assets. A depreciation charge might be calculated for:

- individual non-current assets, or
- all non-current assets in the same category (for example, a depreciation charge for all plant and machinery, a depreciation charge for all motor vehicles, and so on).

The accounting effect of depreciation

Charging depreciation has two effects in the financial statements.

- **Depreciation** is an **expense** in the income statement for each period.
- The depreciation charged in each accounting period adds to the **accumulated depreciation** of the non-current asset. Accumulated depreciation increases over time through use of the asset. It is a credit balance as it reduces the net book value of the non-current assets.

In the statement of financial position the balance on the accumulated depreciation is deducted from the cost or valuation of the assets. The statement of financial position therefore shows the net book value (carrying amount) of the assets.

The book-keeping rules for depreciation

Depreciation charges are made as an end-of-year adjustment, just before preparing the income statement (or statement of comprehensive income) and statement of financial position for the period.

The double entry transaction in the ledger accounts is:

- Debit: Depreciation account (= expense)
- Credit: Accumulated depreciation account (= a credit balance)

The balance on the depreciation expense account is taken to the income statement as an expense for the period.

The balance on the accumulated depreciation account is carried forward as a (credit) balance at the end of the period and appears in the statement of financial position as a deduction from the cost of the non-current assets.

Accounts in the ledger for non-current assets and accumulated depreciation

There is a separate account in the main ledger for:

- each category of non-current assets (for example, an account for land and buildings, an account for plant and machinery, an account for office equipment, an account for motor vehicles, and so on): these accounts record the amount of the assets at cost or possibly at a re-valued amount
- the accumulated depreciation for each category of non-current assets.

This means that each category of non-current assets can be shown separately in the financial statements.



Example

A company purchases a non-current asset in Year 1 for \$90,000. In Year 1, the depreciation charge is \$15,000. These transactions should be recorded as follows:

Asset account			
<i>Year 1</i>	\$		\$
Cash/creditors	90,000	Balance c/f	90,000
	<u>90,000</u>		<u>90,000</u>
<i>Year 2</i>			
Balance b/f	90,000		

Accumulated depreciation account			
<i>Year 1</i>	\$		\$
Balance c/f	15,000	Depreciation	15,000
	<u>15,000</u>		<u>15,000</u>
<i>Year 2</i>			
		Balance b/f	15,000

Depreciation account			
<i>Year 1</i>	\$		\$
Accumulated depreciation	15,000	Income statement	15,000
	<u>15,000</u>		<u>15,000</u>

At the end of Year 1, the net book value of the asset in the statement of financial position is:

	\$
Non-current asset at cost (or valuation)	90,000
Less: Accumulated depreciation	<u>(15,000)</u>
Net book value	<u>75,000</u>

**Example**

Continuing the example, suppose that the depreciation charge In Year 2 is also \$15,000. The ledger accounts in Year 2 will be as follows:

Asset account			
Year 2	\$		\$
Balance b/f	90,000	Balance c/f	90,000
	<u>90,000</u>		<u>90,000</u>
Year 3			
Balance b/f	90,000		

Accumulated depreciation account			
Year 2	\$		\$
Balance c/f	30,000	Balance b/f	15,000
	<u>30,000</u>	Depreciation	15,000
			<u>30,000</u>
Year 3			
		Balance b/f	30,000

Depreciation account			
Year 2	\$		\$
Accumulated depreciation	15,000	Income statement	15,000
	<u>15,000</u>		<u>15,000</u>

At the end of Year 2, the net book value of the asset in the statement of financial position is:

	\$
Non-current asset at cost (or valuation)	90,000
Less: Accumulated depreciation	<u>(30,000)</u>
Net book value	<u>60,000</u>

**Exercise 1**

An item of equipment cost \$40,000 at the beginning of Year 1. It has an expected life of 5 years. The annual depreciation charge will be \$8,000.

Required

Complete the following ledger accounts for Years 1 and 2:

- equipment account
- accumulated depreciation of equipment account
- depreciation of equipment account.

Calculate the net book value of the equipment at the end of Years 1 and 2.

2.4 The purpose of depreciation

It is important to understand the purpose of depreciation. Depreciation is an application of the accruals concept or matching concept.

When a non-current asset is purchased the cost is:

- taken to the non-current asset account at cost and
- shown in the statement of financial position.

The cost is capitalised. However this asset is used within the business in order to earn profits. Therefore some element of its original cost must be charged to the income statement ('charged to profit and loss') each period in order to match the 'consumption' of the cost or value of the assets with the income that the asset is generating.

Depreciation is the element of the cost of the non-current asset that is charged to the income statement each period.

Methods of charging depreciation

- Straight-line method
- Reducing balance method

3 Methods of charging depreciation

There are several ways of charging depreciation each year. The method chosen should represent fairly the loss in value through use of the asset over its useful economic life.

3.1 Straight-line method

This is the most common method in practice, and the easiest to calculate.

$$\text{Annual depreciation} = \frac{\text{Cost of asset minus expected residual value}}{\text{Expected useful life (years)}}$$

The residual value of a non-current asset is its expected disposal value at the end of its expected useful life.

With the straight-line method, the annual depreciation charge is the same for each full financial year over the life of the asset (unless the asset is subsequently re-valued during its life).



Example

A machine cost \$25,000. It has an expected economic life of six years and a sale value of \$7,000 at the end of that time. Annual depreciation will be:

$$\frac{\$25,000 - \$7,000}{6 \text{ years}} = \$3,000 \text{ each year.}$$

Additional rules:

- In the year that a non-current asset is purchased, a proportion of the full annual depreciation might be charged as an expense, according to the proportion of the year for which the asset has been held. In the year a non-current asset is disposed of, a proportion of the annual depreciation will also be charged.
- Alternatively, in the year of acquisition, depreciation for a complete year might be charged. If so, there will be no charge for depreciation in the year of disposal.
- During its life, the estimated remaining useful life of a non-current asset might be altered. If so, the annual depreciation charge for future years will be altered to:

$$\frac{\text{Current net book value of asset minus expected residual value}}{\text{Expected remaining useful life (years)}}$$

This will be considered in more detail later.



Example

A machine cost \$80,000. It was purchased on 1 July Year 1 and has an expected life of five years. Its expected residual value is \$20,000. The entity's financial year ends on 31 December.

The annual depreciation charge is \$12,000 ($= (\$80,000 - \$20,000) / 5 \text{ years}$).

- If a full year's depreciation is charged in the year of acquisition, but no depreciation is charged in the year of disposal, the depreciation charge for Year 1 is \$12,000.
- If a proportional amount of depreciation is charged in the year of acquisition and disposal, the depreciation charge for Year 1 (6 months at \$1,000 per month) is \$6,000.

Depreciation as a percentage of cost

Another way of stating straight-line depreciation is to express the annual depreciation charge as a percentage of the cost of the asset. For example, suppose that an asset has an expected life of 10 years and zero residual value. If straight-line depreciation is used, the annual depreciation charge will be 10% of the cost of the asset.

Similarly, if a non-current asset has an expected life of six years and a residual value equal to 10% of its cost, straight-line depreciation would be 15% of cost each year ($= (100\% - 10\%) / 6 \text{ years}$).

3.2 Reducing balance method

When the reducing balance method is used to charge depreciation, the annual depreciation charge is a fixed percentage each year of the remaining net book value of the asset at the beginning of the year. The annual depreciation charge is therefore highest in Year 1 and lowest in the final year of the asset's economic life.



Example

A machine cost \$100,000. It has an expected life of five years, and it will be depreciated by the reducing balance method at the rate of 30% each year. Annual depreciation and the net book value of the asset each year will be as follows.

Year	Net book value at start of year	Annual depreciation charge (30% of the reducing balance)	Net book value at end of year
	\$	\$	\$
1	100,000	30,000	70,000
2	70,000	21,000	49,000
3	49,000	14,700	34,300
4	34,300	10,290	24,010
5	24,010	7,203	16,807

Note how the annual charge for depreciation reduces each year (in this example by 30% each year) over the life of the asset.



Exercise 2

Attempt a solution to each of the following problems.

- (a) An item of equipment cost \$126,000. It has an expected useful life of six years and an expected residual value of \$24,000. Using the straight-line method of depreciation:
 What is the annual depreciation charge?
 What will be the net book value of the asset after four years?
- (b) An item of equipment cost \$90,000 and has an expected residual value of \$10,000. Its expected life was originally 10 years. It is depreciated by the straight-line method. After three years, the expected remaining useful life of the asset was revised to just three more years from the end of Year 3, and the expected residual value was reduced from \$10,000 to \$8,000.
 What will be the annual depreciation charge in Year 3?
 What will be the net book value of the asset at the end of Year 3?
- (c) The financial year of a company is 1st January to 31st December. A non-current asset was purchased on 1st May for \$60,000. Its expected useful life is five years and its expected residual value is zero. It is depreciated by the straight-line method.
 What will be the charge for depreciation in the year of acquisition if a proportion of a full year's depreciation is charged, according to the period for which the asset has been held?
- (d) A non-current asset cost \$64,000. It is depreciated by the reducing balance method, at the rate of 25% each year.
 What is the annual depreciation charge in Year 1, Year 2 and Year 3?
- (e) An office property cost \$5 million, of which the land value is \$2 million and the cost of the building is \$3 million. The building has an estimated life of 50 years.
 What is the annual depreciation charge on the property, using the straight-line method?

Acquisition and disposal of non-current assets

- Acquisition of tangible non-current assets
- Non-current asset register
- Gain or loss on disposal of a non-current asset
- Accounting for the disposal of non-current assets
- Disposal of non-current assets: part-exchange of an old asset

4 Acquisition and disposal of non-current assets

4.1 Acquisition of tangible non-current assets

Tangible non-current assets are described collectively by international accounting standards as 'property, plant and equipment'. All aspects of accounting for tangible non-current assets are covered by IAS 16 **Property, plant and equipment**.

When an entity acquires an item of property, plant and equipment, its value is initially recorded at cost. In the main ledger, the accounting entry should normally be:

- Debit: Non-current asset account (at cost)
- Credit: Bank account or Payables account (as appropriate)

4.2 Non-current asset register

When a non-current asset is acquired, details of the asset, the date of its acquisition and its cost should be recorded in a register of non-current assets. This register provides a detailed accounting record for individual assets or groups of assets.

For each non-current asset the register will typically contain the following information:

- physical identification number
- manufacturer's serial number (if relevant)
- location of asset
- description of asset
- purchase date
- purchase cost
- any subsequent capital expenditure
- depreciation method and useful life
- annual depreciation charge
- accumulated depreciation to date
- net book value (carrying amount)
- disposal proceeds
- profit/loss on disposal

The purpose of the non-current asset register is that it is a check on the accounting records for non-current assets and it can also be used to reconcile the non-current assets recorded in the register to the actual physical assets held within the business.

The non-current asset register is not a part of the double-entry accounting system, and is not an account in the main ledger.

4.3 Gain or loss on disposal of a non-current asset

Non-current assets are eventually disposed of:

- by sale, or
- if they have no sale value, through disposal as scrap.

Disposal can occur at any time, and need not be at the end of the asset's expected useful life.

The effect of a disposal on the statement of financial position (or accounting equation) is that:

- the asset (at cost or valuation) is no longer in the statement of financial position, and
- the accumulated depreciation on the asset is also no longer in the statement of financial position.

The net book value of the asset is therefore removed from the accounting equation.

There is a gain or loss on disposal of the asset, as follows:

Sale proceeds on disposal		A
Less Disposal costs		(B)
Net disposal value (A – B =)		<u>X</u>
Asset at cost	C	
Less: Accumulated depreciation	<u>(D)</u>	
Net book value at date of disposal (C – D =)		<u>(Y)</u>
Gain /loss on disposal		<u>(X – Y)</u>

- There is a **gain on disposal** if the net sales proceeds exceed the net book value at the time of sale (if X is greater than Y).
- There is a **loss on disposal** if the net sales proceeds are less than the net book value at the time of sale (if X is less than Y).



Example

A non-current asset originally cost \$75,000. Accumulated depreciation is \$51,000. The asset is now sold for \$18,000. Disposal costs are \$500.

What is the gain or loss on disposal?

a**Answer**

Gain or loss on disposal	\$	\$
Sale proceeds on disposal		18,000
Less Disposal costs		<u>(500)</u>
Net disposal value		17,500
Asset at cost	75,000	
Less: Accumulated depreciation	<u>(51,000)</u>	
Net book value at date of disposal		<u>(24,000)</u>
Loss on disposal		<u>(6,500)</u>

e
3**Exercise 3**

A non-current asset cost \$96,000 and was purchased on 1 June Year 1. Its expected useful life was five years and its expected residual value was \$16,000. The asset is depreciated by the straight-line method.

The asset was sold on 1 September Year 3 for \$68,000. There were no disposal costs. It is the company policy to charge a full year of depreciation in the year of acquisition and no depreciation in the year of disposal. The financial year runs from 1 January to 31 December.

What was the gain or loss on disposal?

e
4**Exercise 4**

A non-current asset was purchased on 1 June Year 1 for \$216,000. Its expected life was 8 years and its expected residual value was \$24,000. The asset is depreciated by the straight-line method. The financial year is from 1 January to 31 December.

The asset was sold on 1 September Year 4 for \$163,000. Disposal costs were \$1,000. It is the company policy to charge a proportionate amount of depreciation in the year of acquisition and in the year of disposal, in accordance with the number of months for which the asset was held.

What was the gain or loss on disposal?

4.4 Accounting for the disposal of non-current assets

In the nominal ledger (main ledger), the gain or loss on disposal of a non-current asset is recorded in a **disposal of asset account**. The double entry transactions required are as follows – for an asset recorded at cost rather than at a re-valued amount.

- (a) Transfer the cost of the non-current asset from the asset account to the disposal account:
- Debit: Disposal account
- Credit: Non-current asset account (cost of the asset)

- (b) Transfer the accumulated depreciation on the asset from the accumulated depreciation account to the disposal account:
 Debit: Accumulated depreciation account (or Allowance for depreciation account)
 Credit: Disposal account
 At this point you now have the net book value of the asset in the disposal account.
- (c) Record the disposal costs in the disposal account:
 Debit: Disposal account (disposal expenses)
 Credit: Bank or Payables account
- (d) Record the sale proceeds in the disposal account:
 Debit: Bank or Receivables account
 Credit: Disposal account (sale proceeds)
- (e) The balance on the disposal account is the gain or loss on disposal.
 If the total credit entries are higher than the total debit entries, there is a credit balance and a gain on disposal. The double entry is to the income statement:
 Debit: Disposal account
 Credit: Income statement (profit on disposal)

Disposal of non-current asset account

Debit	Credit
Asset at cost (or valuation)	Accumulated depreciation
Disposal expenses	Disposal proceeds (sale value)
Balance = Gain on disposal	OR Balance = Loss on disposal



Example

A non-current asset cost \$82,000 when purchased. It was sold for \$53,000 when the accumulated depreciation was \$42,000. Disposal costs were \$2,000.

Required

Show the book-keeping entries to record the disposal.

a**Answer****Disposal of asset account**

	\$		\$
Non-current asset account	82,000	Accumulated depreciation account	42,000
Disposal expenses (Bank)	2,000	Sales value (Receivables)	53,000
Gain on disposal (income statement)	11,000		
	<u>95,000</u>		<u>95,000</u>

Non-current asset account

	\$		\$
Opening balance	82,000	Disposal account	82,000

Accumulated depreciation account

	\$		\$
Disposal account	42,000	Opening balance	42,000

Receivables account

	\$		\$
Disposal account (sale value of disposal)	53,000		

Bank account

	\$		\$
		Disposal account (disposal expenses)	2,000

Income statement

	\$		\$
		Disposal account (gain on disposal)	11,000

Non-current asset accounts in the main ledger are usually maintained for a **category** of assets rather than for individual assets. This means that when a non-current asset is disposed of, there will be a closing balance to carry forward on the asset account and the accumulated depreciation account.

e**Example**

In the previous example, suppose that the balance on the non-current asset account before the disposal was \$500,000 and the balance of the accumulated depreciation account was \$180,000. The accounting entries would be as follows:

Non-current assets account

	\$		\$
Opening balance b/f	500,000	Disposal account	82,000
		Closing balance c/f	418,000
	<u>500,000</u>		<u>500,000</u>
Opening balance b/f	418,000		

Accumulated depreciation account

	\$		\$
Disposal account	42,000	Opening balance b/f	180,000
Closing balance c/f	138,000		<u>180,000</u>
	<u>180,000</u>	Opening balance b/f	138,000

**Exercise 5**

A motor vehicle cost \$80,000 two years ago. It has been depreciated by the reducing balance method at 25% each year. It has now been disposed of for \$41,000. Disposal costs were \$200.

The balance on the motor vehicles account before the disposal was \$720,000 and the balance on the accumulated depreciation of motor vehicles account was \$250,000.

Required

Show the book-keeping entries to record the disposal.

4.5 Disposal of non-current assets: part-exchange of an old asset

Sometimes, a supplier will agree to take an old asset in part-exchange for the sale of a new asset. This practice is quite common, for example, with motor vehicles. A business entity may buy a new motor vehicle from a car dealer, and the car dealer will take an old motor vehicle in part-exchange for the new one.

Disposals of assets in part-exchange for a new asset are accounted for in much the same way as disposals of non-current assets for cash. The only difference is that:

- The disposal value of the old asset is the amount that the seller of the new asset allows in part-exchange for the new asset.
- The cost of the new asset is the full purchase price, but the double entry is partly to bank/payables (for the cash payment) and partly to the disposal account for the old asset (for the part-exchange value).

**Example**

Entity X has several motor cars that are accounted for as non-current assets. As at 1 January Year 5, the cost of the entity's cars was \$200,000 and the accumulated depreciation was \$80,000.

On 2 January Year 5, Entity X bought a new car costing \$50,000. The car dealer accepted a car owned by Entity X in part-exchange, and the part-exchange value of this old car was \$4,000. This car originally cost \$30,000 and its accumulated depreciation is \$25,000.

Required

- Calculate the gain or loss on disposal of the old car
- Show how the purchase of the new car and the disposal of the old car will be recorded in the ledger accounts of Entity X.

a

Answer

(a)

	\$	\$
Sale proceeds on disposal (part-exchange value)		4,000
Less Disposal costs		<u>0</u>
Net disposal value		4,000
Asset at cost	30,000	
Less: Accumulated depreciation	<u>(25,000)</u>	
Net book value at date of disposal		<u>(5,000)</u>
Loss on disposal		<u>(1,000)</u>

(b)

Disposal of asset account

	\$		\$
Motor vehicles account	30,000	Accumulated depreciation account	25,000
		Motor vehicles account	
		(Trade-in value)	4,000
		Loss on disposal (income statement)	1,000
	<u>30,000</u>		<u>30,000</u>

Motor vehicles account

	\$		\$
1 January			
Opening balance	200,000	Disposal account	30,000
Bank (50,000 – 4,000)	46,000		
Disposal of asset account	4,000	Closing balance	<u>220,000</u>
	<u>250,000</u>		<u>250,000</u>
2 January			
Opening balance	220,000		

Accumulated depreciation account			
1 January	\$		\$
Disposal account	25,000	Opening balance	80,000
Closing balance	55,000		
	<u>80,000</u>		<u>80,000</u>
2 January			
		Opening balance	55,000

Bank account			
	\$		\$
		Motor vehicles account	46,000
		(Cash paid for new car)	

Income statement			
	\$		\$
Disposal account	1,000		
(Loss on disposal)			



Exercise 6

A company has several motor cars that are accounted for as non-current assets. As at 1 January Year 2, the cost of the cars was \$120,000 and the accumulated depreciation was \$64,000.

During January the company bought a new car costing \$31,000 and was given a part-exchange allowance against an old car that was sold of \$8,000. This car being sold originally cost \$28,000 and its accumulated depreciation is \$18,000.

Required

- Calculate the gain or loss on disposal of the old car
- Show how the purchase of the new car and the disposal of the old car will be recorded in the ledger accounts.

Revaluation of non-current assets

- Revaluation and the entity's accounting policy
- Accounting for revaluation
- Revaluation: book-keeping entries
- Depreciation of a re-valued asset
- Depreciation of a re-valued asset: transfer of excess depreciation
- Revaluation model: the frequency of revaluations
- Disposal of a re-valued non-current asset: gain or loss on disposal

5 Revaluation of non-current assets

5.1 Revaluation and the entity's accounting policy

A non-current asset is recognised in the accounting records at cost when it is first acquired. IAS 16 states that an entity should choose one of two valuation models for its non-current assets after acquisition. The same valuation model should be applied to all assets in the same class.

The two valuation models for non-current assets after acquisition are:

- the **cost model** (i.e. cost less accumulated depreciation)
- the **revaluation model** (i.e. revalued amount less accumulated depreciation since the most recent revaluation).

For example, a company's policy might be to value all its motor vehicles at cost, but to apply the revaluation model to all its land and buildings.

Revaluation of non-current assets is uncommon in sole trader businesses, because the business owner is not usually interested in having information about the fair value of the non-current assets in the financial statements. The cost of obtaining the information does not justify the benefits. However, revaluation of some categories of non-current assets, particularly land and buildings, is common with companies.

5.2 Accounting for revaluation

When a non-current asset is re-valued, its 'carrying amount' in the statement of financial position is adjusted from net book value to a fair value. Fair value is normally current market value.

When an asset is re-valued:

- The asset is recorded at its new value in the asset account
- The amount by which the new value exceeds the net book value of the asset is transferred to a **revaluation reserve account**.

- The increase in value, known as a **revaluation gain**, is **not** reported in the income statement as a profit. However, it is reported as an item within **other comprehensive income** as part of the statement of comprehensive income
- The revaluation surplus account is a non-distributable reserve. The increase in value cannot be used to pay a dividend to shareholders. However, the reserve is a part of shareholders' total capital.



Example

A building owned by a company was purchased a year ago. Its carrying amount in the company's statement of financial position at cost \$9 million less accumulated depreciation of \$100,000. The company's policy is to apply the revaluation model to all its land and buildings. A current valuation of this building is now \$9.6 million, and the asset will be re-valued.

- The building will now be valued in the asset account at \$9.6 million.
- The accumulated depreciation on the building is reduced to zero.
- Future depreciation on the building will be based on the re-valued amount (the value of the building within the total valuation of \$9.6 million for the land and building).
- The asset has been re-valued from its net book value of \$8.9 million to \$9.6 million. The surplus of \$0.7 million on revaluation should be transferred to a revaluation reserve. The surplus must be transferred directly to the revaluation reserve, and must not be reported as a gain or profit in the income statement for the period.

5.3 Revaluation: book-keeping entries

In much the same way that a disposal of asset account is used to establish the gain or loss on disposal of a non-current asset, a **revaluation account** is used to establish the amount to transfer to the revaluation reserve when an asset is re-valued.

The double entry transactions required are as follows.

- (a) Transfer the cost (or valuation) of the non-current asset from the asset account to the revaluation account:
 Debit: Revaluation account
 Credit: Non-current asset account (asset at cost or most recent valuation)
- (b) Transfer the accumulated depreciation on the asset from the accumulated depreciation account to the revaluation account. This is the accumulated depreciation since the most recent revaluation of the asset.
 Debit: Accumulated depreciation account (or Allowance for depreciation account)
 Credit: Revaluation account

- (c) Record the fair value of the asset in the asset account and the revaluation account
 Debit: Non-current asset account (fair value of the asset = re-valued amount)
 Credit: Revaluation account
- (d) Transfer the balance on the revaluation account to the revaluation surplus account (which is a part of equity in a company's statement of financial position).
 Debit: Revaluation account
 Credit: Revaluation reserve account

The balance on the revaluation account is now zero, and the account can be closed.

Revaluation account

Debit	Credit
Asset account: asset at cost or previous revaluation	Accumulated depreciation to date
Balance to revaluation reserve (= debit entry, provided that the revaluation is upwards)	Asset account: asset at re-valued amount

Non-current asset account

Debit	Credit
Revaluation account: asset at re-valued amount	Revaluation account: asset at cost or previous revaluation

Accumulated depreciation account

Debit	Credit
Revaluation account: accumulated depreciation to date	

Revaluation reserve

Debit	Credit
	Revaluation account: amount of the revaluation (if the revaluation is upwards)



Example

An office building was purchased four years ago for \$3 million. The building has been depreciated by \$100,000. It is now re-valued to \$4 million. Show the book-keeping entries to record the revaluation.

a**Answer**

Revaluation account			
	\$		\$
Building account	3,000,000	Accumulated depreciation	100,000
Revaluation reserve (= balancing figure)	1,100,000	Building account	4,000,000
	<u>4,100,000</u>		<u>4,100,000</u>

Building account			
	\$		\$
Opening balance b/f	3,000,000	Revaluation account	3,000,000
Revaluation account	4,000,000	Closing balance c/f	4,000,000
	<u>7,000,000</u>		<u>7,000,000</u>
Opening balance b/f	4,000,000		

Accumulated depreciation of building account			
	\$		\$
Revaluation account	100,000	Opening balance b/f	100,000

Revaluation reserve			
	\$		\$
		Revaluation account	1,100,000

e
7**Exercise 7**

A company owns a building which was purchased three years ago for \$1 million. The building has been depreciated by \$60,000. It is now to be re-valued to \$2 million. Show the book-keeping entries to record the revaluation.

5.4 Depreciation of a re-valued asset

After a non-current asset has been re-valued, depreciation charges are based on the new valuation.

$$\begin{array}{l} \text{Annual depreciation} \\ \text{(straight-line method)} \end{array} = \frac{\text{Re-valued amount} - \text{Expected residual value}}{\text{Expected remaining useful life}}$$

e**Example**

An asset was purchased three years ago, at the beginning of Year 1, for \$100,000. Its expected useful life was six years and its expected residual value was \$10,000. It has now been re-valued to \$120,000. Its remaining useful life is now estimated to be three years and its estimated residual value is now \$15,000. The straight-line method of depreciation is used.

Required

- (a) What is the transfer to the revaluation reserve at the end of Year 3?
- (b) What is the annual depreciation charge in Year 4?
- (c) What is the net book value of the asset at the end of Year 4?

a**Answer**

Annual depreciation originally (for Years 1 – 3)
 $= \$ (100,000 - 10,000) / 6 \text{ years} = \$15,000.$

	\$
Cost	100,000
Less: Accumulated depreciation at the time of revaluation (= 3 years x \$15,000)	(45,000)
Net book value at the time of the revaluation	55,000
Re-valued amount of the asset	120,000
Transfer to the revaluation reserve	65,000

Revised annual depreciation = $\$ (120,000 - 15,000) / 3 \text{ years} = \$35,000.$

The annual depreciation charge in Year 4 will therefore be \$35,000.

	\$
Re-valued amount	120,000
Less: depreciation charge in Year 4	(35,000)
Net book value at the end of Year 4	85,000

5.5 Depreciation of a re-valued asset: transfer of excess depreciation

When an asset is re-valued upwards and depreciation is based on the re-valued amount of the asset, the annual depreciation charge will be higher than it would have been if the asset had not been re-valued but had been valued at historical cost.

Excess depreciation is the difference between:

- the depreciation charge on the re-valued amount of the asset, and
- depreciation that would have been charged on historical cost.

Each year, **there should be a transfer of the excess depreciation for an asset from the revaluation reserve to the retained profits reserve:**

- Debit: Revaluation reserve
- Credit: Retained profits



Example

An asset was purchased two years ago at the beginning of Year 1 for \$600,000. It had an expected life of 10 years and nil residual value. After two years it is re-valued to \$640,000.

For the first two years annual depreciation is \$60,000 ($= \$600,000/10$ years) and at the end of Year 2, its carrying value is \$480,000. The revaluation to \$640,000 can be achieved by making the following book-keeping entries:

Debit: Asset account:	\$40,000	
Debit: Accumulated depreciation account	\$120,000	
Credit revaluation reserve		\$160,000

The asset has 8 more years of expected life, so the annual depreciation charge will increase from \$60,000 to \$80,000 ($= \$640,000/8$ years). There will be excess depreciation each year of \$20,000.

Each year, unless the asset is re-valued again, there should be a transfer between the revaluation reserve and retained profits:

Debit: Revaluation reserve	\$20,000	
Credit: Retained profits		\$20,000

The reason for this transfer is to avoid an odd situation in which the revaluation reserve for an asset could remain unchanged as long as the asset is still owned, regardless of how long it has been used. In the example above, suppose the asset is not re-valued again during its life, and eight years after the revaluation the asset has a carrying value of \$0 because it is fully depreciated.

- The asset account has a debit balance of \$640,000.
- The accumulated depreciation account has a credit balance of \$640,000.
- If there is no transfer of excess depreciation, the revaluation reserve would still have a credit balance of \$160,000, even though the asset is now fully depreciated. This is not sensible accounting.
- By making a transfer each year of \$20,000 excess depreciation from the revaluation reserve to retained profits, by the end of the asset's expected life, there would have been a total transfer of \$160,000 from the revaluation reserve. The revaluation reserve for the asset would be reduced to \$0 and realised profits (retained profits reserve) will have been increased by the \$160,000 of excess depreciation charged through profit and loss.

5.6 Revaluation model: the frequency of revaluations

When the revaluation model is applied to the valuation of non-current assets, the frequency of revaluations should depend on the volatility in the value of the assets concerned. When the value of assets is subject to significant changes (high volatility), annual revaluations may be necessary.

This 'rule' about the frequency of revaluations applies to both tangible non-current assets (IAS 16) and to intangible assets (IAS 38).

5.7 Disposal of a re-valued non-current asset: gain or loss on disposal

When a non-current asset that has been re-valued is eventually disposed of, there is a gain or loss on disposal. This is calculated as:

Sale value on disposal		A
Less disposal costs		(B)
Net disposal proceeds (A – B =)		<u>X</u>
Re-valued amount	C	
Accumulated depreciation since revaluation	(D)	
Net book value at the date of disposal (C – D =)	<u></u>	<u>(Y)</u>
Gain or loss on disposal		<u>(X – Y)</u>

This gain or loss on disposal is reported in the income statement.

Adjusting the revaluation reserve

In addition, the amount by which the asset has been re-valued (minus any excess depreciation already transferred) which is a credit balance in the revaluation reserve (= non-distributable unrealised profit) is transferred to the retained earnings account (= distributable realised profit).

Debit: Revaluation reserve

Credit: Retained earnings

The gain from the increase in value has been realised as a result of the asset disposal, and so is transferred to a realised profits reserve (= retained earnings). However, it is transferred directly to retained earnings and is not reported in the income statement for the year.



Example

A non-current asset was purchased at a cost of \$800,000. It had an expected life of eight years and no residual value. Straight-line depreciation is used; therefore annual depreciation was initially \$100,000 per year.

After two years the asset was re-valued to \$840,000. Its net book value (carrying value) at this date was \$600,000 (= cost less accumulated depreciation of \$200,000); therefore \$240,000 was transferred to the revaluation reserve.

	\$
New valuation	840,000
Net book value at the time of the revaluation	<u>600,000</u>
Transfer to the revaluation reserve	<u>240,000</u>

The revaluation was accounted for as follows.

Debit: Asset account	\$40,000
Debit: Accumulated depreciation	\$200,000
Credit: Revaluation reserve	\$240,000.

In the next year, since the asset had a remaining life of six years, annual depreciation was \$140,000 (= \$840,000/8 years). Excess depreciation was therefore \$40,000 (= \$140,000 - \$100,000). In each of the next two years, there was a transfer of the excess depreciation from revaluation reserve to retained profits:

Debit: Revaluation reserve	\$40,000
Credit: Retained profits reserve	\$40,000

After two years the asset was sold for \$670,000 (net of disposal costs).

	\$	\$
Sale value on disposal		670,000
Re-valued amount	840,000	
Accumulated depreciation since revaluation	<u>(280,000)</u>	
Net book value at the date of disposal (C – D =)		<u>(560,000)</u>
Gain on disposal		<u>110,000</u>

This gain is reported in profit and loss for the year.

The remaining balance on the revaluation reserve for this asset is \$160,000.

	\$
Original credit to revaluation reserve	240,000
Less: Excess depreciation since transferred to retained profits	<u>(80,000)</u>
Remaining credit balance for the asset in revaluation reserve	<u>160,000</u>

When the asset is disposed of, this remaining credit balance is transferred to retained profits, but is not reported within profit and loss for the year.

Debit: Revaluation reserve	\$160,000	
Credit: Retained profits reserve		\$160,000

The entire amount of the revaluation has now been transferred to realised profits (retained profits) from unrealised profits (revaluation reserve), and the revaluation reserve for the asset is \$0.

IAS 16 *Property, plant and equipment*

- Choice of depreciation method
- Review of the remaining useful life and expected residual value
- Disclosure requirements

6 IAS 16 *Property, plant and equipment*

The accounting standard IAS 16 deals with accounting for tangible non-current assets (property, plant and equipment). Some of the rules in this standard have already been explained (for example, measuring the cost of a non-current asset, and accounting for revaluations). One or two additional rules that you should be aware of are explained below.

6.1 Choice of depreciation method

The depreciation method used should reflect the way in which the economic benefits of the asset are consumed by the business over time. The main choice is between the straight line method and the reducing balance method. The reducing balance method is often chosen for assets such as vehicles which lose greater amounts of value in their early years as the reducing balance method reflects this with larger depreciation charges in earlier years.

6.2 Review of the remaining useful life and expected residual value

When the remaining useful life of an asset is considered to be significantly different from the original expectation, annual depreciation charges should be changed, and based on the revised expectation of the remaining useful life.

It is unlikely that the estimated residual value of an asset will be revised, unless the asset is re-valued. When the residual value is revised, the annual depreciation charge should be based on the revised expected residual value.

(This requirement in IAS 16 is consistent with the requirement in IAS 8 *Accounting policies, changes in accounting estimates and errors*. A change in the estimated remaining useful life of a non-current asset, or in the estimate of its residual value, is a change in accounting estimate.)

**Example**

An item of equipment was purchased two years ago on 1 January Year 1. Its cost was \$75,000, its expected life was 8 years and its expected residual value was \$15,000.

Due to technological changes, the estimated life of the asset was re-assessed during Year 3. The total useful life of the asset is now expected to be 6 years and the residual value of the equipment is expected to be \$10,000.

The financial year of the entity ends on 31 December.

The change in the estimate is made in Year 3, which means that the first financial year in which the change can be applied is Year 3.

When the asset was first acquired, the annual depreciation charge was $(\$75,000 - \$15,000)/8 \text{ years} = \$7,500$.

- The net book value of the asset after two years was therefore \$60,000 (= \$75,000 minus depreciation for two years at \$7,500 per year).
- For Year 3, the expected remaining useful life is 4 years and the residual value is now \$10,000.
- The revised annual depreciation charge from Year 3 onwards should be:
 $(\$60,000 - \$10,000)/4 \text{ years} = \$12,500$.
- The depreciation charge in Year 3 should be \$12,500.
- The net book value of the asset at the end of Year 3 is \$47,500 (= \$60,000 – \$12,500).

If you have to deal with this type of problem in your examination, take care with the year from which the change in accounting estimate applies. A change in estimate might be made at the end of a financial year, as part of the process of preparing the financial statements. When this happens, the revised estimate can be applied to the year that has just ended. In the example above, the change of estimate might not be recognised until the end of Year 3, but it can be applied to the financial statements for Year 3.



Exercise 8

An machine was purchased three years ago on 1 January Year 2. It cost \$150,000 and its expected life was 10 years with an expected residual value was \$20,000.

Due to technological changes, the estimated life of the asset was re-assessed during Year 5. The total useful life of the asset is now expected to be 7 years.

The financial year of the entity ends on 31 December.

What is the depreciation charge for the year ending 31 December Year 5?

6.3 Disclosure requirements

IAS 16 requires certain disclosures in the financial statements, as notes to the statements. **For each class of non-current asset**, a note should show:

- the gross carrying amount of the non-current assets (cost or valuation) at the beginning and end of the period, and additions and disposals during the period
- accumulated depreciation of the non-current assets at the beginning and end of the period, and the depreciation charge for the period and accumulated depreciation of assets disposed of.

An example of the way in which this information is presented in a note to the accounts is shown below.

	Machinery	Motor vehicles
	\$	\$
Cost or valuation at the beginning of the year	470,000	175,000
Additions during the year	60,000	35,000
Disposals during the year	(45,000)	(57,000)
Cost or valuation at the end of the year	<u>485,000</u>	<u>153,000</u>
Accumulated depreciation at the beginning of the year	160,000	68,000
Depreciation charge for the year	46,000	32,000
Accumulated depreciation on disposals	(38,000)	(42,000)
Accumulated depreciation at the end of the year	<u>168,000</u>	<u>58,000</u>
Net book value at the beginning of the year	310,000	107,000
Net book value at the end of the year	317,000	95,000

Note: If there are any revaluations of assets during the year, the effect of revaluations should also be shown. A revaluation will:

- add to the cost or valuation of the non-current assets during the year, and also
- reduce the accumulated depreciation on non-current assets (by the reduction in accumulated depreciation at the time of the revaluation).



Example

The financial year of Entity V ends on 30 June. At 1 July Year 6, the balance on the plant and machinery account was \$500,000 and the accumulated depreciation for plant and machinery was \$116,000. During the year to 30 June Year 7, the entity disposed of an item of plant and machinery that had cost \$30,000 and whose net book value was \$8,000 at the time of the disposal.

During the year, the entity purchased plant and machinery costing \$45,000. The depreciation charge for plant and machinery for the year to 30 June Year 7 was \$39,000. The entity does not revalue plant and machinery.

Required

Show how the note on non-current assets in the financial statements of Entity V would report the movements in plant and machinery during the year to 30 June Year 7, to comply with the requirements of IAS 16.

a**Answer**

	Plant and machinery
	\$
Cost at 1 July Year 6	500,000
Additions	45,000
Disposals	(30,000)
Cost at 30 June Year 7	<u>515,000</u>
Accumulated depreciation at 1 July Year 6	116,000
Depreciation charge for the year	39,000
Accumulated depreciation on disposals (30,000 – 8,000)	<u>(22,000)</u>
Accumulated depreciation at 30 June Year 7	<u>133,000</u>
Net book value at 1 July Year 6	384,000
Net book value at 30 June Year 7	382,000

Intangible assets

- Definition of intangible assets
- Accounting for non-current intangible assets

7 Intangible assets

7.1 Definition of intangible assets

An intangible asset is an asset without a physical existence or substance, from which benefits will be obtained over the long-term future. An intangible asset may be included in the statement of financial position as a non-current asset, but only if expenditure has been incurred to obtain it, and it therefore has a measurable cost.

Examples of non-current intangible assets are:

- the cost of purchased patents, copyrights, trademarks and similar rights
- the cost of goodwill, but only if this has been purchased
- the cost of development expenditure.

Goodwill

Goodwill may be purchased when one business entity buys another. It is the difference between the purchase price for the acquired business and the fair value of the net assets of the business. For example if Entity X purchases another business for \$200,000 and the fair value of the net assets of the acquired business is \$150,000, there is **purchased goodwill** of \$50,000. This will be included in the statement of financial position of Entity X as an intangible asset.

However **internally-generated goodwill** – the value of the business that is attributable to the reputation and customer relationships of the business or the skills of its employees built up – must not be reported as an intangible asset (because it does not have a value that can be reliably measured).

7.2 Accounting for non-current intangible assets

The accounting treatment for intangible assets is similar to the accounting treatment of tangible non-current assets (property, plant and equipment).

The asset is shown in the statement of financial position as a non-current asset. Intangible assets are shown separately from tangible non-current assets.

A non-current asset is depreciated. However, the term used for the depreciation of intangible assets is **amortisation**, and intangible assets are **amortised** over the period in which they are expected to provide benefits to the company. The straight-line method is normally used and the residual value of a non-current intangible asset will be zero.

In the statement of financial position, an intangible asset is shown at cost less the accumulated amortisation (and less any impairment losses, although impairment losses are not included in the syllabus for your examination).

Exceptions to the requirement to amortise intangible assets

IAS 38 **Intangible assets** makes an important **exception** to the general rule that intangible non-current assets are amortised. This exception applies to **purchased goodwill**.

IAS 38 also states that intangible assets with an 'indefinite' useful life should not be amortised. An intangible asset has an indefinite life when there is no foreseeable limit to the time that the asset is expected to generate economic benefits. However, IAS 38 does not specify any examples.



Example

Big Sound Company purchased music rights from another business at a cost of \$12,000. The music rights are expected to provide future economic benefits to the company over six years.

The company will show the music rights as an intangible asset in the statement of financial position. The annual charge for amortisation in the income statement should be \$2,000 ($\$12,000/6$ years). In the statement of financial position, the asset will be shown at the cost of \$12,000 less the accumulated amortisation.

There should be an amortisation charges account (expense account) and an allowance for amortisation account (credit balance) in the main ledger. This is the same as a depreciation account and an accumulated depreciation account that are used for items of property, plant and equipment.

Research and development expenditure

- The difference between research and development
- Accounting for research and development expenditure
- Development expenditure as an intangible asset
- Amortisation of development expenditure

8 Research and development expenditure

8.1 The difference between research and development

Many businesses spend large amounts of money on research and development, in order to discover new products and bring them to the market.

- **Research** is original and planned work that is undertaken with the intention of discovering new scientific or technical knowledge.
- **Development** is the application of knowledge obtained from research to design a new product or service or process for commercial use. Development costs are incurred before the product, service or process is introduced into commercial use.

Research takes place first. If the results of the research are positive, an entity may then go on to develop new products or operating methods. Development therefore follows on from successful research.

8.2 Accounting for research and development expenditure

The problem with research and development expenditure is that successful development work on new products or techniques creates value for the future, in the form of higher revenues, lower operating costs, and higher profits. These benefits might be obtained over a period of many years in the future.

It could therefore be argued that the costs of successful developments should not be treated as an operating expense in the year when the expense occurs. Instead, the expenses should be spread over the years in the future when the benefits are expected to occur.

This accounting problem is dealt with by the accounting standard IAS 38 *Intangible assets*. IAS 38 has the following requirements.

Research costs

Research costs must always be accounted for as an expense. They are charged as an expense for the accounting period in which the expenditure is incurred.

This is because research might not be successful, and it is not possible to link current research to the success of future development on new products or techniques. Since research costs cannot be linked to future benefits, the cost should be treated as an expense in the financial period when the costs occur.

Development costs

Development costs are either:

- treated as an expense, or
- 'capitalised', and treated as an intangible non-current asset.

IAS 38 specifies when each of these accounting treatments of developments costs is appropriate.

8.3 Development expenditure as an intangible asset

Development costs should be treated an intangible non-current asset only if **all** of the following matters can be demonstrated:

- the technical feasibility of completing the development work, so that the item will be made available for commercial use or sale
- the intention to complete the item that is being developed, and use it or sell it
- the ability of the company to use or sell the item
- how the intangible asset will probably generate future economic benefits for the business. If the development costs relate to a product or service, there must be evidence that a market exists for the product or the service. If the item is being developed for internal use, there must be evidence that it will have a commercial use.
- the availability of adequate technical resources, financial resources and other resources to complete the development work
- that the cost of the development work for the intangible asset can be measured reliably.

When development expenditure is treated as a non-current asset, the item 'development expenditure' or 'development costs' will be reported as an intangible asset in the statement of financial position.

Development costs must be capitalised if all the criteria in the list above are met. Otherwise they must not be capitalised and must be charged as an expense in the period when they are incurred.

Development costs cannot be capitalised retrospectively. If all the criteria for capitalisation are met, only those costs incurred from that time onwards are capitalised. Costs incurred in the past and treated as revenue expenditure cannot now be capitalised as a non-current asset.

8.4 Amortisation of development expenditure

The cost of the intangible asset for development expenditure should be the amount of the development expenditure incurred.

This asset should be amortised over the period when it will bring economic benefit to the company. Amortisation of the intangible asset should not begin until the economic benefits start to be enjoyed.



Example

During Year 5, a company incurs costs of \$105,000 on research and \$240,000 on development. Of the total development costs, \$60,000 does not meet the criteria for recognition as a non-current asset. The other development costs are expected to bring economic benefits to the company over a period of four years, beginning in Year 6.

The accounting treatment of the research and development expenditure should be as follows:

- Research and development expenses to be included as an expense in Year 5 = \$105,000 + \$60,000 = \$165,000.
- Development costs that should be 'capitalised' and reported as an intangible non-current asset at the end of Year 5 = \$180,000 (= \$240,000 – \$60,000).
- Amortisation of the development expenditure should begin from Year 6. If the amortisation is charged by the straight-line method, it will be \$45,000 in each year for the four years Year 6 – Year 9.

Practice multiple choice questions

- 1 A business purchased an asset on 1 July 2007 at a cost of \$160,000. It has an expected life of five years, and is being depreciated at the rate of 25% per year by the reducing balance method. The asset was sold on 30 June 2010 for \$60,000.

What was the gain or loss on disposal?

- A Gain \$4,000
- B Loss \$4,000
- C Gain \$7,500
- D Loss \$7,500

(1 mark)

- 2 A company's land and buildings were valued as follows:

	Cost	Accumulated depreciation	Net book value
	\$	\$	\$
Land	600,000	0	600,000
Buildings	1,500,000	150,000	1,350,000

The land is re-valued to \$700,000 and the building to \$1,700,000.

What entries should be made in the main ledger to record the revaluation?

	Dr	Cr	
	\$	\$	
A Land and buildings	450,000		
Revaluation reserve		450,000	
B Land and buildings: accumulated depreciation	150,000		
Land and buildings	300,000		
Revaluation reserve		450,000	
C Land and buildings	300,000		
Land and buildings: accumulated dep'n		150,000	
Revaluation reserve		150,000	
D Revaluation reserve	300,000		
Land and buildings		300,000	(2 marks)

- 3** The plant and machinery at cost account of a business for the year ended 31 December 2009 was as follows:

Plant and machinery – cost			
2009	\$	2009	\$
1 Jan Balance	720,000	30 Sept Transfer disposal account	63,000
1 July Cash	36,000	31 Dec Balance	693,000
	<u>756,000</u>		<u>756,000</u>

The company's policy is to charge depreciation at 20% per year on the straight line basis, with proportionate depreciation in the years of purchase and disposal.

What should be the depreciation charge for the year ended 31 December 2009?

- A** \$138,600
B \$144,450
C \$143,550
D \$138,150 **(2 marks)**
- 4** A company purchased an asset on 1 July 2006 at a cost of \$140,000. The asset had an expected life of ten years and a residual value of \$20,000. Straight-line depreciation is used. The company's financial year ends on 30 June.
- At 30 June 2010, the estimated remaining life of the asset from that date is now expected to be only three more years, but the residual value is unchanged.
- What will be the net book value of the asset as at 30 June 2010, for inclusion in the statement of financial position?
- A** \$83,000
B \$76,000

C \$60,000

D \$92,000

(2 marks)

- 5** A company purchased a building two years ago for \$4 million. The building has an expected life of 50 years and straight line depreciation is used. After two years the building was re-valued to \$4.8 million.

What should be the accounting entries for depreciation and excess depreciation in the following year?

	Dr	Cr	
	\$	\$	
A Depreciation expense	80,000		
Accumulated depreciation		80,000	
Revaluation reserve	20,000		
Retained profits		20,000	
B Depreciation expense	100,000		
Accumulated depreciation		100,000	
Revaluation reserve	20,000		
Retained profits		20,000	
C Accumulated depreciation	100,000		
Revaluation reserve	20,000		
Depreciation expense		120,000	
D Accumulated depreciation	80,000		
Retained profits	40,000		
Depreciation expense		100,000	
Revaluation reserve		20,000	(2 marks)

Accruals and prepayments. Receivables and payables

Contents

- | | |
|---|--|
| 1 | Accruals and prepayments |
| 2 | Receivables: bad debts (irrecoverable debts) |
| 3 | Receivables ledger control account |
| 4 | Payables ledger control account |

Accruals and prepayments

- The matching concept (accruals concept)
- Accrued expenses (accruals)
- Accrued expenses: calculating the expense for the income statement
- Prepaid expenses (prepayments)
- Prepaid expenses: calculating the expense for the income statement
- Accrued expenses and prepayments: the rules summarised
- Accrued income and prepaid income

1 Accruals and prepayments

The previous chapters have explained that at the end of a financial year, adjustments are made in the accounts to record depreciation (and amortisation) on non-current assets and to deal with opening and closing inventory.

End-of year adjustments are also required for accruals and prepayments, and for irrecoverable debts. These are explained in this chapter.

1.1 The matching concept (accruals concept)

Financial statements are prepared using the accruals basis of accounting. This means that:

- Sales should be matched with the cost of making those sales, to establish the gross profit for the accounting period. The adjustments for opening and closing inventory achieve this purpose.
- Time-related expenses should be charged against profit for the period to which the expenses relate. The actual payment in cash for these expenses, and when these payments occur, is irrelevant. Examples of time-related expenses are rental costs and insurance costs.

For example, the cost of rental charges on office accommodation should be spread over the period of time to which the rental payments relate, regardless of when the actual payment of rent occurs. If annual rental is paid in advance on 1 June each year, and the financial year ends on 30 September, the rental charge in the income statement for the year to 30 September 2010 would be:

- 8/12 of the annual rental paid on 1 June 2009 for the period 1 October 2009 – 31 May 2010, plus
- 4/14 of the annual rental paid on 1 June 2010 for the period 1 June – 30 September 2010.

At 30 September 2010, the company has already paid rent in advance for the 8 months 1 October 2010 to 31 May 2011.

1.2 Accrued expenses (accruals)

Accrued expenses are expenses incurred in an accounting period that have not yet been paid and for which no invoice has been received. Accrued expenses occur when expenses are paid in arrears.

Since there has been no payment and no invoice, a financial transaction has not yet occurred and there is not yet anything to record as a book-keeping entry in the ledgers. However, to apply the accruals basis of accounting, the expense must be charged in the income statement for the accounting period to which the expense relates.

This is done by creating an accrued expense at the end of the accounting period. An accrued expense (accrual) is an estimate of the cost that has been incurred in the financial period, and it is included in expenses in the income statement for the period.

There are two ways of accounting for accruals at the end of an accounting period.

Method 1: the 'two account' approach for accrued expenses

- The accrued expense is recorded in an accrued expenses account. The double entry for this adjustment is:
 - Debit the expense account with the accrued expense at the end of the period.
 - Credit the accruals account.
- The accrued expense is therefore added to the expense in the current accounting period. The credit balance on the accruals account is a liability, and should be included in the statement of financial position as a current liability (or 'sundry payable').
- At the beginning of the next accounting period, the balance in the accruals account is taken back to the expense account by means of the following double entry:
 - Debit the accruals account with the accrued expense for the previous period.
 - Credit the expense account.

Method 1 is used in computerised accounting systems.

Method 2: the 'one account' approach for accrued expenses

With the one account approach, we do not use an accruals account.

- An accrued expense at the end of an accounting period is recorded in the expense account as a closing balance at the end of one period and an opening balance at the beginning of the next period.
 - Debit the expense account 'above the line' (for the current accounting period) with the accrued expense at the end of the period.
 - Credit the expense account 'below the line' as an opening credit balance at the beginning of the next period.

- The accrued expense at the end of the period is included in the statement of financial position as a current liability (accruals).



Example

Yuri sets up in business on 1 January Year 1. He acquires a telephone system on 1 February, and pays telephone charges every three months in arrears. The telephone invoices for Year 1 are as follows:

	\$
30 April	5,000
31 July	7,500
31 October	8,500

It is expected that the next invoice, at the end of January Year 2, will be for \$9,000. Yuri prepares his annual accounts to 31 December each year.

To calculate the telephone expenses for Year 1, it is often necessary to estimate the expense for November and December, and to make an accrual. If the estimated invoice at the end of January Year 2 is \$9,000, the accrual for November and December Year 1 should be \$6,000 ($\$9,000 \times 2/3$).

Method 1: two account approach

Telephone expenses account			
Year 1	\$		\$
Bank	5,000	Income statement	27,000
Bank	7,500		
Bank	8,500		
Accrued expense (accruals account)	6,000		
	27,000		27,000
Year 2			
		Accruals account	6,000

Accruals account			
Year 1	\$		\$
Closing balance c/f	6,000	Telephone expenses account	6,000
	6,000		6,000
Year 2			
Telephone expenses account	6,000	Opening balance b/f	6,000

The accruals account balance is reduced to 0 at the beginning of Year 2 by transferring the balance to the telephone expenses account.

Method 2: one account approach

Telephone expenses account			
Year 1	\$		\$
Bank	5,000	Income statement	27,000
Bank	7,500		
Bank	8,500		
Closing balance c/f (accrued expense)	6,000		
	<u>27,000</u>		<u>27,000</u>
		Opening balance b/f	6,000

The expense in the income statement for Year 1 is \$27,000 and the accrued expense of \$6,000 is included in the statement of financial position as a current liability at the end of Year 1.

**Example (continued)**

In Year 2, the telephone invoices are as follows:

	\$
31 January	9,500
30 April	9,500
31 July	10,000
31 October	10,000

It is expected that the next invoice will be for \$10,500.

If the estimated invoice on 1 February Year 3 is \$10,500, the accrual for Year 1 should be \$7,000 ($\$10,500 \times 2/3$).

Method 1: two account approach

Telephone expenses account			
Year 2	\$		\$
Bank	9,500	Accruals account	6,000
Bank	9,500	Income statement	40,000
Bank	10,000	(balancing figure)	
Bank	10,000		
Accrued expense (accruals account)	7,000		
	<u>46,000</u>		<u>46,000</u>
Year 3		Accruals account	7,000

Accruals account			
Year 2	\$		\$
Telephone expense account	6,000	Opening balance b/f	6,000
Closing balance c/f	7,000	Telephone expenses account	7,000
	<u>13,000</u>		<u>13,000</u>
		Opening balance b/f	<u>7,000</u>

Method 2: one account approach

Telephone expenses account			
Year 2	\$		\$
Bank	9,500	Opening balance b/f	6,000
Bank	9,500	Income statement	40,000
Bank	10,000	(balancing figure)	
Bank	10,000		
Closing balance c/f (accrued expense)	7,000		
	<u>46,000</u>		<u>46,000</u>
		Opening balance b/f	<u>7,000</u>

The expense in the income statement for Year 2 is \$40,000 and the accrued expense of \$7,000 is included in the balance sheet as a current liability at the end of Year 2.

1.3 Accrued expenses: calculating the expense for the income statement

When there are accrued expenses for an item of expenditure, the total amount to be charged to the income statement for the period is:

	\$
Invoices/payments for the year	A
+ Closing accrued expense	B
	<u>A + B</u>
– Opening accrued expense	C
= Expense for the year	<u>A + B - C</u>

Alternatively, the annual charge can be calculated applying the accruals concept and working out the cost on a time basis.



Example

A company rents a machine and pays rental charges quarterly in arrears on 28 February, 31 May, 31 August and 30 November each year. The annual rental was \$12,000 until 1 September 2010, when it was increased to \$18,000.

The company's financial year ends on 31 December.

Method 1

For the year to 31 December 2010, the annual machine rental cost, for inclusion in the income statement for the year, can be calculated as follows.

	\$
For the 8 months 1 January – 31 August 2010: $8/12 \times \$12,000$	8,000
For the 4 months 1 September – 31 December 2010: $4/12 \times \$18,000$	6,000
Total rental charge for the year	<u>14,000</u>

At 31 December 2010, there is an accrued expense for the rental cost in December 2010. This will not be paid until 28 February 2011. Accrued rent of \$1,500 ($\$18,000/12$ months) for one month will therefore be included in accruals (a liability) in the statement of financial position at 31 December 2010.

In the same way at 31 December 2009, the previous year, there was accrued rental costs of \$1,000 ($= \$12,000/12$ months) for rent in December 2009.

Method 2

The total amount to be charged to the income statement for the year to 31 December 2010 could also be calculated as follows:

	\$
28 Feb, 31 May, 31 August 2010 ($3/4 \times \$12,000$)	9,000
30 November 2010 ($1/4 \times \$18,000$)	4,500
+ Closing accrued expense at 31 December 2010	<u>1,500</u>
	15,000
– Opening accrued expense at 1 January 2010	<u>(1,000)</u>
= Expense for the year	<u>14,000</u>

Both methods produce the same answer. You might find Method 1 easier to remember and apply.

**Exercise 1**

A business has an accrued expense for factory rental on 1 January Year 3 of \$28,000. Payments of factory rental were \$42,000 on 28 February, \$42,000 on 31 May, \$42,000 on 31 August and \$48,000 on 30 November. The next rental payment on 28 February Year 4 will be \$48,000.

Required

Calculate the expense for factory rental for the year to 31 December Year 3 and the accrued expense in the statement of financial position as at that date.

1.4 Prepaid expenses (prepayments)

Prepaid expenses are expenses that are recorded in the accounts in the current period, because a purchase invoice has been received or a payment has been made, but all or part of the expense relates to a future accounting period.

Prepaid expenses occur whenever payments are made in advance for an expense item.

To apply the accruals basis of accounting, the expenses that have been recorded in the accounts but that relate to a future accounting period should be:

- excluded from the expenses in the income statement for the current year and
- included in the expenses for the next financial period, which is the period to which they relate.

Accounting for prepayments at the end of an accounting period is similar to accounting for accrued expenses. There is a 'two account' and a 'one account' method.

Method 1: the 'two account' approach for prepayments

- The prepayment is recorded in a prepayments account. The double entry for this adjustment is:
 - Debit the prepayments account with the amount of the prepayment at the end of the period.
 - Credit the expense account.
- The prepayment therefore reduces the expense in the current accounting period, because it is a credit entry in the expense account. The debit balance on the prepayments account is an asset, and should be included in the statement of financial position as a current asset.
- At the beginning of the next accounting period, the balance in the prepayments account is taken back to the expense account by means of the following double entry:
 - Debit the expense account with the prepayment for the previous period.
 - Credit the prepayments account.

Method 1 is used in computerised accounting systems.

Method 2: the 'one account' approach for prepayments

With the one account approach, we do not use a prepayments account.

- A prepayment at the end of an accounting period is recorded in the expense account as a closing balance at the end of the current accounting period and an opening balance at the start of the next period.
 - Credit the expense account 'above the line' (for the current accounting period) with the prepayment at the end of the period.

- Debit the expense account 'below the line' as an opening debit balance at the beginning of the next period.
- The prepayment at the end of the period is included in the statement of financial position as a current asset (prepayments).



Example

Gregor sets up in business on 1 January Year 1. On 1 March he obtains annual insurance on his office building, starting from 1 March. The annual cost of the insurance is \$24,000, payable annually in advance. Gregor prepares his annual accounts to 31 December each year.

To calculate the expense for insurance for Year 1, it is necessary to recognise that some of the money that has been paid relates to insurance in the next financial year (January and February Year 2). Only ten months of the insurance cost relates to the current financial period (Year 1).

The charge to the income statement for insurance in Year 1 should therefore be \$20,000 ($\$24,000 \times 10/12$). The prepaid expense for Year 2 is \$4,000 ($\$24,000 \times 2/12$).

Method 1: two accounts approach

Insurance expenses account			
Year 1	\$		\$
Bank	24,000	Income statement	20,000
		Prepayments account	4,000
	<u>24,000</u>		<u>24,000</u>
Year 2			
Prepayments account	4,000		

Prepayments account			
Year 1	\$		\$
Insurance expenses account	4,000	Closing balance c/f	4,000
	<u>4,000</u>		<u>4,000</u>
Year 2			
Opening balance b/f	4,000	Insurance expenses account	4,000

Method 2: one account approach

Insurance expenses account			
Year 1	\$		\$
Bank	24,000	Income statement	20,000
		Closing balance c/f (prepayment)	4,000
	<u>24,000</u>		<u>24,000</u>
Year 2			
Opening balance b/f	4,000		

The expense in the income statement is \$20,000 and the prepaid expense is included in the statement of financial position as a current asset at the end of Year 1.



Example

Continuing the previous example, suppose that in Year 2, the annual insurance premium payable on 1 March is \$30,000 for the year to 28 February Year 3.

The prepaid expense at the end of Year 2 is therefore \$5,000 ($\$30,000 \times 2/12$) and the insurance expense in Year 2 is accounted for as follows:

Method 1: two accounts approach

Insurance expenses account			
Year 2	\$		\$
Prepayments account	4,000	Income statement	29,000
Bank	30,000	(balancing figure)	
		Prepayments account	5,000
	<u>34,000</u>		<u>34,000</u>
Year 3			
Prepayments account	5,000		

Prepayments account			
Year 2	\$		\$
Opening balance b/f	4,000	Insurance expenses account	4,000
Insurance expenses account	5,000	Closing balance c/f	5,000
	<u>9,000</u>		<u>9,000</u>
Year 3			
Opening balance b/f	5,000	Insurance expenses account	5,000

Method 2: one account approach

Insurance expenses account			
Year 2	\$		\$
Opening balance b/f	4,000	Income statement	29,000
Bank	30,000	(balancing figure)	
		Closing balance c/f	5,000
	<u>34,000</u>		<u>34,000</u>
Year 3			
Opening balance b/f	5,000		

The expense in the income statement is \$29,000. This consists of the prepayment at the beginning of the year (\$4,000 for January and February) plus the expense for the 10 months from March to December ($(\$30,000 \times 10/12) = \$25,000$). The prepaid expense of \$5,000 at the end of Year 2 is included in the statement of financial position as a current asset.

1.5 Prepaid expenses: calculating the expense for the income statement

When there are prepaid expenses for an item of expenditure, the total amount to be charged to the income statement for the period is:

	\$
Invoices/payments for the year	A
+ Opening prepaid expense	<u>B</u>
	A + B
– Closing prepaid expense	<u>C</u>
= Expense for the year	<u>A + B - C</u>

Alternatively, the annual charge can be calculated applying the accruals concept and working out the cost on a time basis.



Example

A company pays an annual premium on an insurance policy. The premium was \$36,000 for the year to 30 April and was increased to \$42,000 for the year to 30 April 2011. The company's financial year ends on 30 September.

What is the charge to include in profit and loss for the insurance for the year to 30 September 2010, and what is the amount of the prepayment that will be in the statement of financial position as at 30 September 2010?



Answer

	\$
For the 7 months 1 October 2009 – 30 April 2010: $7/12 \times \$36,000$	21,000
For the 5 months 1 May – 30 September 2010: $5/12 \times \$42,000$	<u>17,500</u>
Total insurance cost for the year	<u>38,500</u>

At 30 September 2010, there is a prepaid expense for insurance for the period 1 October 2010 to 30 April 2011, which is for 7 months. The monthly premium cost is \$3,500 ($= \$42,000/12$ months). The total prepayment at 30 September is therefore \$24,500 ($= 7 \text{ months} \times \$3,500$). This prepayment will be included in current assets in the statement of financial position as at 30 September 2010.

In the same way at 30 September 2009, the previous year, there were prepaid insurance premium costs of \$21,000 ($= 7 \text{ months at } \$3,000 \text{ per month}$).

Method 2

The total amount to be charged to the income statement for the year to 30 September 2010 could also be calculated as follows:

	\$
Invoices/payments for the year (on 30 April 2010)	42,000
+ Opening prepaid expense	21,000
	<u>63,000</u>
– Closing prepaid expense	(24,500)
= Expense for the year	<u>38,500</u>

Both methods produce the same answer. You might find Method 1 easier to remember and apply.

1.6 Accrued expenses and prepayments: the rules summarised

End-of-year adjustments to accruals and prepayments are made in order to apply the matching concept to the measurement of profit or loss.

Accrued expenses and prepaid expenses are also recognised in the statement of financial position as liabilities and assets respectively. The rules can be summarised briefly as follows.

Accruals	Prepayments	\$
Invoices/payments for the year	Invoices/payments for the year	A
+ Closing accrued expense	+ Opening prepaid expense	B
		<u>A + B</u>
– Opening accrued expense	– Closing prepaid expense	(C)
= Expense for the year	= Expense for the year	<u>A + B – C</u>
Accrued expense (accrual)	Prepaid expense (prepayment)	
= current liability	= current asset	
Liability: Therefore credit balance	Asset: Therefore debit balance	

**Example**

A company made payments of \$49,600 to an electricity supply company during the year to 31 December 2010. At the beginning of 2010, there was an accrual of \$4,400 on the electricity expenses account. At the end of 2010, it has been estimated that there is an accrued expense of \$5,100.

Required

Calculate the amount to be included for electricity expenses in the income statement for the year to 31 December 2010.

a**Answer**

	\$
Invoices/payments for the year	49,600
+ Closing accrued expense	5,100
	54,700
– Opening accrued expense	(4,400)
	50,300

e
2**Exercise 2**

A business entity rents a machine, and pays the rental charges each quarter in advance. Total rental payments during the year to 31 December 2010 were \$12,900. At the beginning of 2010, there was a prepayment of \$1,700 on the machine rental account. At the end of 2010, there is a prepaid expense of \$1,900.

Required

Calculate the amount to be included for machine rental costs in the income statement for the year to 31 December 2010.

1.7 Accrued income and prepaid income

A business may have miscellaneous forms of income from renting out property. When a business entity has income from sources where payments are made in advance or in arrears, there will be prepaid income or accrued income.

The accruals basis of accounting applies, and the amount of income to include in profit and loss for a period is the amount of income that relates to that period. It may therefore be necessary to apportion income on a time basis.

For example, rent is often paid in advance, and sometimes in arrears. This means that if an entity owns a property and rents it to a tenant, there may be:

- Rental income received in advance: this is prepaid income
- Rental income accrued: this is income that has been earned but for which payment has not yet been received. Rental income for which payment is overdue (in arrears) is also accrued rental income. Provided that the tenant does not become a 'bad debt', accrued income should be included in profit and loss for the period to which it relates.

The method of calculating income for the year when there is accrued or prepaid income is the same in principle as the method of calculating an expense for the year when there is an accrued charge or a prepaid expense. The accruals basis applied. In addition:

- Income received in advance (prepaid income) should not be included in income for the year, and should be reported as a liability in the statement of financial position at the end of the year.

- Income receivable but not yet received, including payments overdue, should be included in income for the year, and should be reported as an asset (accrued income) in the statement of financial position at the end of the year.

e

Example

A business rents out a part of its premises. Rentals are payable each quarter in arrears on 31 January, 30 April, 31 July and 31 October in arrears. The company has a year end of 31 December. The annual rental was \$30,000 per year until 31 October 2010 but was then increased to \$36,000 per year from 1 November 2010.

What figures should appear in the financial statements for the year ending 31 December 2010?

a

Answer

	\$
For the 10 months 1 January – 31 October 2010: $10/12 \times \$30,000$	25,000
For the 2 months 1 November – 31 December 2010: $2/12 \times \$36,000$	6,000
Rental income for the year to 31 December	<u>31,000</u>

At 31 December 2010 there is also rental earned but not yet received. This is the rental income for November and December 2010, which will not be received until 31 January 2011. The amount of the accrued income is \$6,000 (2 months at \$3,000 per month) and this will be included as a current asset in the statement of financial position as at the end of the financial year.

Accrued income ($2 \times \$3,000$) (debit balance) \$ 6,000

e

Example

A business rents out a part of its premises. The rent is payable every six months on advance, on 1 May and 1 November in advance. The company has a year end of 31 December. The annual rental was \$48,000 for the year to 30 April 2010 and \$60,000 for the year to 30 April 2011.

What figures should appear in the financial statements for the year ending 31 December 2010?

a

Answer

	\$
For the 4 months 1 January – 30 April 2010: $4/12 \times \$48,000$	12,000
For the 8 months 1 May – 31 December 2010: $8/12 \times \$60,000$	40,000
Rental income for the year to 31 December	<u>52,000</u>

At 31 December 2010 there is prepaid rental income for the period 1 January – 30 April 2011. The amount of prepaid income is 4 months $\times$ \$5,000 per month = \$20,000. This will be included as a current liability in the statement of financial position as at the end of the financial year.

Prepaid income (credit balance)	\$ 20,000
---------------------------------	-----------

Prepaid income represents money received but not yet earned. It is therefore a form of creditor and is shown as a liability in the statement of financial position (credit balance).

Receivables: bad debts (irrecoverable debts)

- Sales on credit
- Bad debts and doubtful debts
- Definition of bad debts
- Writing off bad debts
- Doubtful debts: making an allowance for irrecoverable debts
- Creating or increasing an allowance for irrecoverable debts
- Reducing an allowance for irrecoverable debts
- Aged receivables analysis
- A bad debt recovered
- Summary of the rules on bad and doubtful debts

2 Receivables: bad debts and doubtful debts

2.1 Sales on credit

A business might make all its sales for cash but many businesses make some or even all their sales on credit. If sales are made on credit, there is always a chance that the customer will not pay.

There is often no alternative to offering credit to customers. If competitors offer credit, then a business will have little alternative but to offer credit as well so as not to lose custom. A major benefit of offering credit is that it usually increases revenue, compared to what revenue would be if all sales were for cash.

There are, however, costs involved. In particular there is a risk that the money will never be received and the debts will turn out 'bad'.

A business should take all possible precautions against the bad debt risk. One way of doing this is to set credit limits for each credit customer. A credit limit is the total amount that each individual customer can have outstanding at any one time. If their next order means that the credit limit is exceeded, then they should be asked to pay some invoices before the order can be processed.

2.2 Bad debts and doubtful debts

Bad debts

When a business sells goods or services on credit, there is an unavoidable risk that the customer will not pay, in spite of all the efforts that are made to obtain payment. A bad debt is an amount owed by a customer that the business decides it will never be able to collect. It gives up any hope of collecting the debt and 'writes it off'. The amount receivable is removed from the receivables ledger and the statement of financial position.

Doubtful debts

A doubtful debt is different. Doubtful debts arise when there is a high risk that some debts will become bad. The business has not yet given up hope of collecting the amount receivable, and it does not write off the debt and eliminate it from the receivables ledger.

However, applying the **concept of prudence** to preparing financial statements, and basing the estimate on historical evidence of what has happened in the past, **an allowance is made** for the probability that some debts will eventually become bad debts at some time in the future.

Bad debts and doubtful debts are accounted for differently, although there is often just a single 'irrecoverable debts' expense account in the main ledger.

Irrecoverable debts

The term 'irrecoverable debts' is now often used. This term includes both:

- actual amounts receivable written off as 'bad' – an expense
- allowances for doubtful debts that might become 'bad' in the future but have not been written off yet.

This chapter uses the terms 'bad debts' and 'doubtful debts' to make the distinction clear between receivables actually written off and receivables for which an allowance is made. In your examination, expect to come across the terms:

- irrecoverable amounts written off, and
- the 'allowance for irrecoverable receivables' or 'allowance for irrecoverable debts'.

2.3 Definition of bad debts

Bad debts are receivables that an entity is owed, but that it now does not expect to collect. A debt might become bad because the customer has gone out of business, or the customer has successfully disputed an invoice. Decisions about bad debts might be made at the year end.

2.4 Writing off bad debts

When a specific debt (receivable) is considered bad or irrecoverable, it is written off. When a bad debt is written off, it is reduced to zero in the receivables ledger (and total receivables account):

- The total value of receivables is reduced. Bad debts therefore reduce total assets.
- The bad debt is recorded as an expense, and therefore reduces the profit.

In the main ledger:

- Debit: Irrecoverable debts account (an expense account)
- Credit: Receivables control account

In the receivables ledger, the debt in the account of the individual customer is written off and reduced to zero.



Example

A business has trade receivables of \$75,000 but decides to write off a bad debt of \$5,000.

Receivables control account			
	\$		\$
Opening balance b/f	75,000	Bad and doubtful debts	5,000
		Closing balance c/f	70,000
	<u>75,000</u>		<u>75,000</u>
Opening balance b/f	70,000		

Bad and doubtful debts account (expense)			
	\$		\$
Receivables	5,000		

At the end of the financial period, the bad debt expense will be transferred to the income statement as an expense for the period:

- Debit: Income statement \$5,000
- Credit: Irrecoverable debts \$5,000

In the receivables ledger, the balance on the customer's account is reduced by \$5,000 (in all probability, from \$5,000 to \$0.)

2.5 Doubtful debts: making an allowance for irrecoverable debts

In addition to writing off bad debts, a business will make an allowance at the end of its financial year for doubtful debts. This can be thought of as an application of prudence in financial reporting.

When a business has a large amount of receivables, it might be reasonable to expect, from experience, that some of the debts will be irrecoverable (bad). However, there is no way of knowing which particular debts will be bad.

To be prudent, the business should make an allowance for irrecoverable debts.

When a bad debt is written off, receivables are reduced. An allowance for irrecoverable debts is different from bad debts. When an allowance for irrecoverable debts is created, total receivables are not reduced. Instead, the allowance for irrecoverable debts is recorded in a separate account in the main ledger – an allowance for irrecoverable debts account. This always has a credit balance.

Accounting for doubtful debts can be confusing. It might help to look separately at what happens:

- when an allowance is created for the first time, or when it is increased at the end of an accounting period, and
- when an allowance is reduced at the end of an accounting period.

2.6 Creating or increasing an allowance for irrecoverable debts

When an allowance for irrecoverable debts is created or when an allowance is increased (from the end of the previous accounting period), the double entry in the main ledger is as follows:

- Debit: Irrecoverable debts expense
- Credit: Allowance for irrecoverable debts (with the increase in the allowance).
The allowance for irrecoverable debts account is a liability account (as it is effectively the reduction in value of an asset account – receivables). The increase therefore must be credited to the allowance account.

The increase in the allowance is also an expense, which reduces profit therefore debit to the irrecoverable debts account.

In the statement of financial position, the allowance for irrecoverable debts is not shown separately as a liability under the heading for current liabilities. Instead, it is deducted from total trade receivables.

	\$
Trade receivables	A
Less: Allowance for irrecoverable debts	(B)
Net receivables (shown in statement of financial position)	<u>A - B</u>

The charge for irrecoverable debts expense in the income statement is the amount of the irrecoverable debts written off, plus the increase during the year in the allowance for irrecoverable debts.

	\$
Bad debts (irrecoverable debts written off)	A
Plus: Increase in allowance for irrecoverable debts	B
Total charge to profit and loss	<u>A + B</u>

2.7 Reducing an allowance for irrecoverable debts

If the allowance for irrecoverable debts is reduced (compared with the end of the previous accounting period), there is a 'negative expense'. The double entry in the main ledger is:

- Debit: Allowance for irrecoverable debts (with the amount of the decrease in the allowance)
- Credit: Irrecoverable debts expense

A decrease in the allowance for irrecoverable debts adds to profit in the period by reducing the total expense for irrecoverable debts. It also reduces the credit balance on the allowance account.



Example

A business has trade receivables of \$75,000. It decides that \$5,000 of these debts should be written off as 'bad'. In addition, an allowance for irrecoverable debts of \$2,000 should be created. Until now, the business has not made any allowance for irrecoverable debts. These transactions will be accounted for as follows:

Receivables account			
	\$		\$
Opening balance b/f	75,000	Irrecoverable debts (bad debt written off)	5,000
		Closing balance c/f	70,000
	<u>75,000</u>		<u>75,000</u>
Opening balance b/f	70,000		

Note: The balance on the trade receivables account is reduced by the bad debts written off, but not by the allowance for doubtful debts.

Irrecoverable debts account (expense)			
	\$		\$
Receivables (bad debts)	5,000	Income statement	7,000
Allowance for irrecoverable debts	<u>2,000</u>		<u>7,000</u>
	7,000		

Allowance for irrecoverable debts account (liability)			
	\$		\$
		Irrecoverable debts (expense)	2,000

In the statement of financial position, trade receivables will be reported as:

	\$
Trade receivables	70,000
Less: Allowance for irrecoverable debts	<u>2,000</u>
	<u>68,000</u>

The charge for irrecoverable debts expense in the income statement is the amount of the irrecoverable debts written off, minus the reduction during the year in the allowance for irrecoverable debts.

	\$
Bad debts (irrecoverable debts written off)	A
Minus: Reduction in allowance for irrecoverable debts	<u>(B)</u>
Total charge to profit and loss	<u>A – B</u>



Example

Continuing the example, suppose that in the following year (Year 2), sales (all on credit) were \$200,000, receipts from customers were \$185,000 and bad debts written off were \$8,000. It is decided to reduce the allowance for irrecoverable debts from \$2,000 to \$1,500. These transactions can be summarised as follows:

Receivables account			
	\$		\$
Opening balance b/f	70,000	Bank	185,000
Sales	200,000	Irrecoverable debts (bad debts written off)	8,000
		Closing balance c/f	77,000
	<u>270,000</u>		<u>270,000</u>
Opening balance b/f	77,000		

Note: The credit entry in the receivables account for irrecoverable debts is for the amount of the bad debts written off.

Irrecoverable debts account			
	\$		\$
Receivables (bad debts)	8,000	Allowance for irrecoverable debts	500
		Income statement	7,500
	<u>8,000</u>		<u>8,000</u>

Note: The amount charged in this account as an expense for the period is the bad debt written off minus the reduction in the allowance for irrecoverable debts.

Allowance for irrecoverable debts account			
	\$		\$
Irrecoverable debts (2,000 – 1,500)	500	Opening balance b/f	2,000
Closing balance c/f	1,500		
	<u>2,000</u>		<u>2,000</u>
		Opening balance b/f	1,500

In the statement of financial position, trade receivables will be:

	\$
Trade receivables	77,000
Less: Allowance for irrecoverable debts	<u>1,500</u>
	<u>75,500</u>



Exercise 3

Continuing the same example above, the following year (Year 3) sales (all on credit) were \$250,000, receipts from customers were \$252,000 and bad debts written off were \$7,000. It is decided to reduce the allowance for doubtful debts from \$6,000 to \$4,500. Record these transactions in the following ledger accounts:

- (a) trade receivables
- (b) bad and doubtful debts
- (c) allowance for doubtful debts.

1.8 Aged receivables analysis

Preparing an aged receivables analysis is a method of attempting to assess the likelihood of bad debts or to make an assessment of doubtful receivables. This is an analysis for each individual credit customer of their total debtor balance, showing how long each invoice has been outstanding. A typical format for an aged receivables analysis is given below:

<i>Customer</i>	<i>Credit limit</i>	<i>Total owed</i>	<i>< 30 days</i>	<i>30 – 60 days</i>	<i>60 – 90 days</i>	<i>Over 90 days</i>
	\$	\$	\$	\$	\$	\$
X	20,000	5,500	3,000	–	2,500	–
Y	15,000	2,700	–	1,000	1,000	700

If a customer has old amounts outstanding, these should be investigated and an attempt should be made to collect payment. However the investigation may indicate that the amount should either be written off as a bad debt, or that an allowance should be made for an irrecoverable debt. (In other words, the debt is not written off yet, but the chances of it being paid look doubtful.)

1.9 Bad debt recovered

On some rare occasions a debt that had been written off as bad in a previous year is then subsequently received in a later period. The double entry for recording the recovery of a bad debt is:

Debit	Cash
Credit	Income statement (other income)

1.10 Summary of the rules on bad and doubtful debts

The rules for dealing with bad debts and doubtful debts at the end of the financial year can be summarised as follows.

Income statement

Annual charge in the income statement =

- Bad debts written off
- **plus** Increase in allowance for irrecoverable (doubtful debts), or
- **minus** Reduction in allowance for irrecoverable (doubtful) debts

Statement of financial position

In the statement of financial position:

- Bad debts reduce the total trade receivables
- Doubtful debts do not reduce total trade receivables, but the allowance for irrecoverable debts is a liability. Instead of showing it in the statement of financial position together with the other current liabilities, the allowance for irrecoverable debts is set off against (deducted from) total trade receivables.

Receivables ledger control account

- Introduction
- Basic rules: debit and credit entries in the receivables account

3 Receivables ledger control account

3.1 Introduction

For the purpose of this section, it is sufficient to understand that a receivables ledger control account is the name given to the account in the main ledger for total receivables. A control account is an account that records total amounts – in this case, total amounts for receivables.

For your examination, you need to understand the rules of double-entry book-keeping for the receivables control account. The basic rules were explained in the earlier chapter on accounting for sales. This section introduces some additional items.

A common form of examination question in the past has been a receivables ledger control account that has been prepared incorrectly by a 'trainee accountant', with some debit and credit entries on the wrong side of the account. You are then required to correct the errors to find a balancing figure to complete the account correctly. This missing figure is usually (but not necessarily) the closing balance for receivables at the end of the period.

To deal with this question you must know which types of transaction are debit entries in the receivables account, and which are credit entries.

3.2 Basic rules: debit and credit entries in the receivables account

Opening receivables balance

The opening balance in the receivables ledger control account is a debit balance, because amounts receivable are an asset.

Occasionally there might also be a small credit balance in the receivables account, in addition to a debit balance. Credit balances arise when customers have paid more than they actually owe, so that the business entity owes its customers money.

Debit entries in the receivables control account

The receivables ledger control account records all transactions involving credit customers.

Debit entries in the receivables control account are transactions that add to the total amount of receivables. These include:

- (1) Credit sales
- (2) Interest charged on overdue accounts (Debit Receivables, Credit Interest income)
- (3) Cheques received in payment from customers but subsequently dishonoured (i.e. the bank refuses to make payment). The double entry is then Debit Receivables, Credit Bank. The customer's cheque is invalid and has 'bounced', so the cheque payment received is 'reversed' in the receivables account.

Credit entries in the receivables ledger control account

Credit entries in the receivables ledger control account are transactions that reduce the total amount of receivables. These include:

- (1) Payments received from credit customers
- (2) Sales returns (for credit sales)
- (3) Discounts allowed to customers for early payment
- (4) Contra entries, reducing balances in the payables ledger. Contra entries were explained in the earlier chapter on sales and purchases
- (5) Bad debts written off.

Entries not recorded in the receivables ledger control account

Transactions are not recorded in the receivables ledger control account unless they relate to credit sales and specific credit customers. Transactions NOT recorded in the ledger account are:

- (1) Cash sales (Debit Bank, Credit Sales)
- (2) Changes in the Allowance for irrecoverable debts account.

Payables ledger control account

- Introduction
- Basic rules: debit and credit entries in the payables account
- Refunds from suppliers

4 Payables ledger control account

4.1 Introduction

The payables ledger control account is the name given to the account in the main ledger for total trade payables.

For your examination, you need to understand the rules of double-entry book-keeping for the payables ledger control account, as well as for the receivables account. The basic rules were explained in the earlier chapter on accounting for purchases.

4.2 Basic rules: debit and credit entries in the receivables account

Opening receivables balance

The opening balance in the payables ledger control account is a credit balance, because amounts payable are a liability.

Occasionally there might also be a small debit balance in the payables account, in addition to a credit balance. Debit balances arise when suppliers have been paid more than they are actually owed, so that the supplier owes money. The supplier might eventually pay back the over-payment in the form of a refund.

Credit entries in the payables control account

The payables ledger control account records all transactions involving credit purchases. Since business entities make most of their purchases on credit (with the exception of petty cash items), the control account records virtually all purchases.

Credit entries in the payables control account are transactions that add to the total amount of payables. These include:

- (1) Purchases (but not any cash purchases)
- (2) Refunds from suppliers (see below).

Debit entries in the payables ledger control account

Debit entries in the payables ledger control account are transactions that reduce the total amount of payables. These include:

- (1) Payments made to suppliers

- (2) Purchases returns
- (3) Discounts received from suppliers for early payment
- (4) Contra entries, reducing balances in the receivables ledger. Contra entries were explained in the earlier chapter on sales and purchases. Whenever there is a contra entry on the debit side of the payables ledger control account, there must be a matching credit entry in the receivables ledger control account.

4.3 Refunds from suppliers

Occasionally a supplier might make a refund. This occurs when the supplier has been paid too much for the goods or services provided, and issuing a credit note is not a suitable way of dealing with the problem because payment has already been made. (Credit notes are issued when there are purchase returns, and the purchase invoice is therefore for too much money. The credit note has the effect of reducing the amount payable, before payment is actually made.)

When a supplier makes a refund, there is a debit balance in the account for the individual supplier, rather than a credit balance. The refund removes the debit balance.

The effect of a refund is therefore to increase the total amount of payables. For example, suppose that a company is owed \$1,000 by a supplier for an overpayment, and owes its other suppliers \$30,000. The net credit balance on the payables account would be \$29,000. If the supplier pays a refund of \$1,000, the balance on the payables ledger control account will increase to \$30,000.

Refunds are therefore recorded in the main ledger as follows:

- Debit: Bank
- Credit: Payables ledger control account.

Practice multiple choice questions

- 1** At 1 July 2009 a company had an allowance for irrecoverable debts of \$51,000.

At 30 June 2010, total trade receivables were \$942,000. It was decided to write off \$86,000 of these debts and to adjust the allowance for irrecoverable debts to \$65,000.

What amounts should be included in the company's statement of financial position at 30 June 2010?

	Trade receivables	Allowance for receivables	Net trade receivables	
	\$	\$	\$	
A	942,000	65,000	877,000	
B	856,000	65,000	791,000	
C	856,000	116,000	740,000	
D	942,000	116,000	826,000	(2 marks)

- 2** Details of a company's insurance policy costs are as follows.

Premium for year ending 31 March 2010, paid April 2009: \$27,600

Premium for year ending 31 March 2011, paid April 2010: \$30,000

What figures should be included within profit or loss for the year to 30 June 2010 for insurance costs, and what should be included in the statement of financial position as at 30 June 2010?

	Income statement	Statement of financial position	
	\$	\$	
A	28,200	22,500	prepayment (Dr)
B	29,400	22,500	prepayment (Dr)
C	28,200	22,500	accrual (Cr)
D	29,400	22,500	accrual (Cr)

(2 marks)

- 3** A company owns a number of office properties that it rents to tenants. The following information is available for the year ended 30 June 2010.

	Rent in advance	Rent in arrears
	\$	\$
30 June 2009	127,900	5,700
30 June 2010	138,100	9,400

Cash received from tenants during the year to 30 June 2010 was \$948,300. All rental income in arrears was subsequently received in full.

What figure should appear in profit or loss for the year to 30 June 2010 for rental income?

- A** \$954,800
B \$1,199,200
C \$697,400
D \$941,800
- (2 marks)**

- 4 An inexperienced bookkeeper has drawn up the following payables ledger control account, which contains errors:

Payables ledger control account			
	\$		\$
Opening balance		Purchases	447,000
(amounts owed to suppliers)	212,500		
Cash paid to suppliers	491,000	Discounts received	2,700
Purchases returns	7,600	Contras against receivables ledger	12,800
Refunds received from suppliers	3,200	Closing balance	251,800
	<u>714,300</u>		<u>714,300</u>

What should the closing balance be after correcting the errors made in preparing the account?

- A** \$148,600
B \$276,400
C \$171,000
D \$154,000

(2 marks)

- 5 A company has occupied rented premises for a number of years, paying rent quarterly in advance on 1 January, 1 April, 1 July and 1 October each year. Until 1 April 2010, the annual rental was \$240,000. It was then increased to \$288,000 each year.

What figures should appear in the company's financial statements for rent for the year ended 30 November 2010?

	Income statement	Statement of financial position	
	\$	\$	
A	272,000	24,000	prepayment (Dr)
B	272,000	48,000	prepayment (Dr)
C	276,000	Nil	
D	272,000	24,000	accrual (Cr)

(2 marks)

- 6 At 1 January 2010 a company had an allowance for receivables of \$44,000. At 31 December 2010 the company's trade receivables were \$749,000 and it was decided to write off balances totalling \$29,000 as irrecoverable. In addition it was decided to adjust the allowance for receivables to 5% of the remaining receivables, based on past experience.

What total figure should appear in profit or loss for bad debts and allowance for receivables, for the year to 31 December 2010?

- A** \$21,000
B \$65,000
C \$37,000
D \$22,475

(2 marks)

- 7** The following control account has been prepared by a trainee accountant.

Receivables ledger control account

	\$		\$
Opening balance	268,900	Cash received from credit customers	106,400
Credit sales	115,800	Interest charged on overdue accounts	1,600
Cash sales	15,700	Discounts allowed	2,400
Contras against payables ledger	5,300	Bad debts written off	5,900
		Allowance for receivables	3,100
		Closing balance	286,300
	405,700		405,700

What should the closing balance be after correcting the errors made in preparing the account?

- A** \$263,200
- B** \$282,000
- C** \$266,300
- D** \$247,500

(2 marks)

Provisions and contingencies

Contents	
1	Liabilities and provisions
2	Contingent liabilities and assets

Liabilities and provisions

- Definition of a liability
- Accounting treatment of liabilities
- Provisions
- Accounting for provisions
- Increasing provisions
- Reducing a provision
- Recognition and measurement of provisions

1 Liabilities and provisions

1.1 Definition of a liability

A liability is defined by the IASB Framework as a present obligation arising as a result of a past transaction or event. The settlement of a liability will result in an outflow of resources or economic benefit, such as the payment of cash.

The main elements in this definition are as follows.

- **Obligation.** The entity has an obligation that has arisen from an event or transaction in the past. This is often a legal obligation, such as the contractual obligation to pay a supplier for the purchase of goods or services. An obligation might be a constructive obligation where the obligation arises out of an established past practice or a valid expectation or declared policy of the business entity - such as a promise by the business entity to refund the price of goods to customers if the customers are dissatisfied.
- **The obligation exists now.** The obligation is a present obligation. It is not an obligation that will or might occur in the future. The **payment** will occur in the future, but the **obligation to pay** already exists.
- **Outflow of economic benefits.** The obligation will result in an outflow of economic benefits at some time in the future. This will normally take the form of payments in cash, or the transfer of an asset other than cash.

Examples of liabilities are loans from a bank, bonds issued by a company, trade payables, tax payable to the government, and accrued expenses.

1.2 Accounting treatment of liabilities

IAS 1 states that liabilities should normally be shown in the statement of financial position as either:

- current liabilities (payable within 12 months or within the normal trading cycle of the entity)
- non-current liabilities: these are all liabilities that are not current.

1.3 Provisions

IAS 37 *Provisions, contingent assets and contingent liabilities* defines a provision as ‘a liability of uncertain timing or amount’. A provision is therefore a type of liability, and meets the definition of a liability.

IAS 37 explains how provisions differ from other liabilities.

- With a **provision**, there is uncertainty about the timing or the amount of the future payment that will be required to settle the obligation.
- With a **liability** such as a trade payable or a bank loan, the liability is for a certain amount and it is also certain (or fairly certain) when settlement (= payment) will be required.
- An **accrual is a liability** for goods or services payable in the future where the actual amount of the payment is usually not yet known (because there has not yet been an invoice from the supplier). For example, accrued electricity charges are an accrued expense for electricity based on an estimate of the amount of the next electricity bill. However, the uncertainty with an accrual is much less than the uncertainty for a provision.

1.4 Accounting for provisions

When a provision is created:

- the amount of the provision is recognised as an expense in the income statement for the period
- a liability is created in the statement of financial position for the amount of the provision.

A provision should be shown in the statement of financial position. It is shown as a liability, but separate from other liabilities. (Whereas accruals are often included with trade payables as a single figure in the statement of financial position, a provision must be shown on a line of its own.)

Provisions should also be shown in the statement of financial position as either a current liability or a non-current liability, depending on when settlement of the obligation is expected to occur.



Example

A company has recently lost a legal dispute, and will have to make a payment in the future to settle the dispute. As at the end of its financial year, Year 1, the amount of the payment is uncertain, but it has been estimated as \$150,000.

The company should create a provision for the liability arising to settle the legal dispute:

- Debit: Legal costs (expense) \$150,000
- Credit: Provision for legal costs (liability) \$150,000.

If settlement is expected in Year 2, the provision will be reported within current liabilities as a short-term provision. By creating the provision, the company incurs an expense, which will be included in profit and loss for the period.

Settlement of a provision

The liability for which a provision has been made will eventually be settled. When this happens, the liability is reduced to zero. This can be accounted for as follows:

- Debit: Provision (reduce the provision to zero)
- Credit: Expense account (= the expense account where the provision was charged as an expense).

Study the following example carefully.



Example

In the previous example, suppose that the legal dispute is eventually settled in Year 2 by a payment of \$162,000.

The accounting entries in Year 2 will be:

	Debit	Credit
	\$	\$
Debit: Legal expenses	162,000	
Credit: Bank		162,000
To record the actual payment		
Debit: Provision	150,000	
Credit: Legal expenses		150,000
To record the reduction in the provision		
Debit: Income statement	12,000	
Credit: Legal expenses		12,000
The charge for legal expenses in the Year 2 income statement		

The total cost of the liability is \$162,000, but by creating a provision in Year 1 the cost is divided between Year 1 (\$150,000) and Year 2 (\$12,000). The charge for legal expenses in Year 2 is simply the difference between the actual cost of \$162,000 and the provision that had been made in the previous year.

If the cost of settling the legal dispute had been less than \$150,000, there would be a profit in Year 2 when the provision is reduced to \$0. For example, if the cost of settling the dispute in Year 2 was only \$130,000, there would be a credit to the income statement of \$20,000, increasing profit for the year.

1.5 Increasing a provision

In some cases, a long-term provision that was created in an earlier year might be increased at the end of a subsequent year, when the amount of the obligation is re-assessed. When a provision is increased:

- the **increase** in the amount of the provision is recognised as an expense in the income statement for the period, and
- the provision in the statement of financial position is increased to its revised, higher amount.



Example

A company is in a long-running legal dispute, and in Year 1 it was advised by its lawyers that the company would probably be required to pay \$600,000 to settle the dispute. The company therefore made a provision for legal costs of \$600,000 in Year 1.

The dispute was not settled by the end of Year 2, when the company was advised that the likely cost of settlement would be \$950,000. The company therefore increased its provision for legal costs to \$950,000 in Year 2.

The accounting entries will be:

	Debit	Credit
Year 1		
Debit: Legal expenses	\$ 600,000	
Credit: Provision for legal expenses To record the provision		\$ 600,000
Debit: Income statement	600,000	
Credit: Legal expenses To charge the amount provided to profit and loss		600,000
Year 2		
Debit: Legal expenses	350,000	
Credit: Provision for legal expenses To increase the provision		350,000
Debit: Income statement	350,000	
Credit: Legal expenses The charge for legal expenses in the Year 2 income statement		350,000

1.6 Reducing a provision

Similarly, in some cases a long-term provision that was created in an earlier year might be reduced at the end of a subsequent year. When a provision is reduced:

- the **reduction** in the amount of the provision reduces expenses in the income statement for the period, and
- the provision in the statement of financial position is reduced to its revised, lower amount.



Example

A company made a provision of \$8 million for reorganisation costs at the end of Year 1. In Year 2 the reorganisation began and actual costs of reorganisation during Year 2 were \$2 million. At the end of Year 2 it was estimated that the remaining costs of reorganisation would be \$3.5 million

The accounting entries will be:

	Debit	Credit
Year 1	\$	\$
Debit: Reorganisation costs	8,000,000	
Credit: Provision for reorganisation costs		8,000,000
To record the provision		
Debit: Income statement	8,000,000	
Credit: Legal expenses		8,000,000
To charge the amount provided to profit and loss		
Year 2		
Debit: Reorganisation costs	2,000,000	
Credit: Bank		2,000,000
Actual costs incurred		
Debit: Provision for reorganisation costs	4,500,000	
Credit: Reorganisation costs		4,500,000
To reduce the provision from \$8 million to \$3.5 million		
Debit: Reorganisation costs	2,500,000	
Credit: Income statement		2,500,000
To increase profit by the reduction in the provision minus actual costs incurred		

1.7 Recognition and measurement of provisions

In the past, some companies were suspected of using provisions to manipulate their reported annual profits (an example of 'window dressing' of financial statements). A company might create a provision in one year, which would have the effect of reducing profits in that year. The next year, the provision would then be used or reduced, which would have the effect of reducing costs and increasing profits for that year. Provisions could therefore be used to move profits and losses from one year to another.

IAS 37 seeks to prevent the use of provisions to manipulate or 'window dress' financial statements.

Recognising provisions

IAS 37 states that a provision should only be recognised if the following conditions are met:

- The entity has a present obligation arising out of a past event or transaction.
- It is probable that an outflow of economic resources (such as cash payments) will be required to settle the obligation. 'Probable' means more likely than not.
- Although the amount of the obligation is uncertain, there is a reliable estimate of what it will be. This estimate might be based on a range of probable outcomes.

Examples of events or transactions that might result in a provision are:

- an obligation to settle a legal dispute, where the legal case has already been lost but the amount of the settlement has not yet been decided
- an obligation to pay clean-up costs for causing environmental damage
- an obligation to pay decommissioning costs to take an asset out of service at the end of its useful life (for example a provision for decommissioning a nuclear reactor).

IAS 37 specifically deals with certain situations where provisions may or may not be created.

- A provision cannot be made for future operating losses. There is no present obligation arising out of past events; therefore a provision cannot be made. If a company expects to make an operating loss in the next financial year, it cannot make a provision and take the loss in the current year instead.
- A provision can be made for future restructuring costs, when an entity closes down a part of its business operations, or re-organises its management structure, or decides to relocate operations to another country or region. However, a provision may only be made if there is a detailed formal plan for the restructuring and there is an expectation that the restructuring will take place. If the reorganisation plan has been agreed but has not been formally announced and employees have not yet been told, a provision cannot be made.

Measurement of provisions

The amount of a provision should be the best estimate of the amount (before tax) that will be required to settle the obligation.

- If the obligation is for a single transaction or event, the most likely amount of the obligation should be used.
- If there are obligations for many similar transactions, an expected value should be calculated for the obligations. An example is a provision for future costs that will be incurred to honour warranty obligations.



Example

A company sells its products under warranty. It promises to bear the costs of repairing any goods that it has sold, within a 12-month period after the time of sale. The company has estimated that the average cost of a repair is \$150, and that if all

the goods it sold in the past months needed repair under warranty, the total cost of repairs would be \$3,000,000. It has also estimated that the probability that goods will be returned for repair under warranty is 4%.

A provision should be recognised. The amount of the provision will be measured as \$120,000 ($= 4\% \times \$3,000,000$).

The provision will be reported as a short-term provision, but there will be a provision each year in the balance sheet for obligations under warranty agreements. This provision might increase or be reduced from one year to the next.

Contingent liabilities and assets

- Definition of contingent liabilities and contingent assets
- Contingent liabilities and actual liabilities or provisions
- Recognising contingent liabilities
- Contingent liabilities: the accounting rules
- Contingent assets
- Contingent assets and contingent liabilities: disclosure requirements

2 Contingent liabilities and assets

2.1 Definition of contingent liabilities and contingent assets

‘Contingent’ means ‘dependent on something happening’.

- A **contingent liability** is a liability that will only occur if something happens in the future. It can be defined as a **possible obligation arising from an event that has already happened**, and whose existence will only be confirmed by the occurrence or non-occurrence of an uncertain future event. This uncertain future event should be not wholly within the control of the company to make it happen.
- A **contingent asset** is an asset that will arise (such as cash income) or a benefit that will occur only if something happens in the future. It is similar to a contingent liability, except that it is a possible benefit rather than a possible obligation.

2.2 Contingent liabilities and actual liabilities or provisions

A contingent liability is different from a liability (or provision) because there is doubt about whether the obligation will lead to an outflow of economic benefits. The liability is ‘contingent’ (dependent) on something that will happen or will not happen in the future.

Examples of contingent liabilities include the following.

- The outcome of a legal dispute, in which the company might be required to make a large payment to settle the dispute (contingent liability) or might receive a substantial amount of money in settlement (contingent asset). The legal decision has not yet been made; therefore it is too soon to make a provision.
- The possibility of having to pay a fine to a regulating body for a breach of regulations (contingent liability).
- The possibility of having to meet an obligation under a guarantee given to a bank on behalf of another company. A contingent liability exists when there is a risk that this other company will fail to repay the loan and the bank will call on the guarantee. The guarantee might therefore be a contingent liability.

2.3 Recognising contingent liabilities

A decision has to be made whether an item is a contingent liability or not.

- Is the item a contingent liability or an actual liability? For example, should the item be a provision? With a provision, the obligation will **probably** result in an outflow of economic benefits **and** a reliable estimate can be made of the amount of the obligation. With a contingent liability:
 - the obligation is a possible obligation, but not a probable obligation (so that it is less than 50% likely to happen), or
 - there is an obligation but the outflow of economic benefits is not probable (= less than 50% likely to happen), or
 - there is an obligation but a reliable estimate of the amount of the obligation cannot be made.
- Is the item a contingent liability, or is there only a remote possibility that it will happen? If the likelihood that an actual obligation will arise is remote, the item should be ignored altogether, and should not be treated as a contingent liability for the purpose of financial reporting.

IAS 37 uses the concept of 'probable' to distinguish between actual liabilities (or provisions), contingent liabilities and items to be ignored.

2.4 Contingent liabilities: the accounting rules

The accounting rules for contingent liabilities are provided by IAS 37. The rules are set out below:

Is there a present obligation as a result of a past event?	Will it give rise to the outflow of economic benefits?	Can the amount of the obligation be measured reliably?	The item is:
Yes	Probable (= more than 50%)	Yes	A liability (or provision) . Include in the financial statements
Yes	Not probable (= less than 50%)	-	A contingent liability . Report the item as a contingent liability in a note to the financial statements
Yes	Probable	No	A contingent liability . Report the item as a contingent liability in a note to the financial statements
Possible, it depends on a future event	Likelihood is not remote	-	A contingent liability . Report the item as a contingent liability in a note to the financial statements
Possible, it depends on a future event	Likelihood is remote	-	Ignore. Do not report in a note to the accounts.

IAS 37 defines probable as 'more likely than not', i.e. more than 50% probability.

Having decided whether an item is a liability (or provision, which is a form of liability), a contingent liability or a remote possibility, the accounting rules are therefore:

- recognise a liability or provision in the financial statements and include in the statement of financial position (and as an expense in profit and loss)
- do not recognise a contingent liability in the financial statements and do not include in the statement of financial position (or in profit and loss): instead, give details of the contingent liability in a note to the financial statements
- ignore entirely items where the possibility of an obligation arising is remote.

2.5 Contingent assets

There are similar problems with contingent assets. Is the item a contingent asset or not?

- Is it a contingent asset, or is it an actual asset? If the future benefit is certain or 'virtually certain' it is an actual asset and the item should be 'recognised' in the financial statements. It should be included as an actual asset in the statement of financial position.
- Is it a contingent asset, or is the likelihood that it will happen not sufficiently high to treat it as a contingent asset? If the likelihood of future economic benefits is not strong enough, the item should be ignored for the purpose of financial reporting.

For example suppose that a company is in a legal dispute and is claiming \$10 million from another company for breach of contract. Should this be treated as an asset, a contingent asset, or ignored?

IAS 37 uses the concepts of 'virtual certainty', 'probable' to distinguish between actual assets, contingent assets and items to be ignored. The rules in IAS37 are as follows:

Is there an asset?	Will it give rise to the inflow of economic benefits?	The item is:
Yes	Yes	An asset . Include in the financial statements
Possibly	Virtually certain	An asset . Include in the financial statements
Possibly	Probable (= more than 50% probability)	A contingent asset . Report the item as a contingent asset in a note to the financial statements
Possibly	Not probable	Ignore. Do not report in a note to the accounts.

Having decided whether an item is an actual asset, a contingent asset or less than 50% probable, the accounting rules are therefore:

- recognise an asset in the financial statements and include in the statement of financial position (and as income in profit and loss)
- do not recognise an asset in the financial statements and do not include in the statement of financial position (or in profit and loss): instead, give details of the contingent asset in a note to the financial statements
- ignore entirely items where the possibility of economic benefits arising is less than 50%.

2.6 Contingent assets and contingent liabilities: disclosure requirements

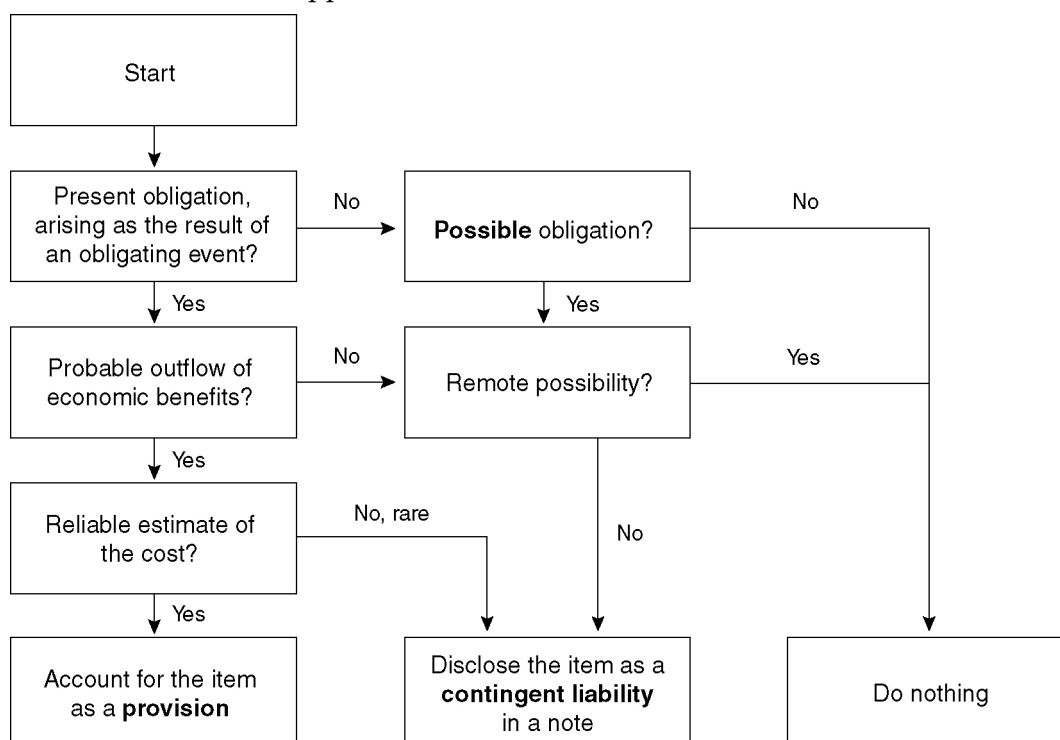
When an item is reported as a contingent liability or a contingent asset, it is not recorded in the main ledger accounts. The note to the financial statements simply gives a narrative description of the item – including the nature of the item and the uncertainties relating to the amount or the timing of the item.

IAS 37 also includes the following requirements:

- When any disclosures required about a provision, a contingent asset or a contingent liability are not possible, because it is not practicable to provide the information, this fact should be disclosed.
- In the **very rare** occasions when disclosure of the information could seriously prejudice the entity in a dispute with another person (about the matter to which the provision or contingent item relates), the required information need not be disclosed. However, the note to the accounts should describe the general nature of the dispute and the reason why the required information has not been disclosed.

Summary to IAS 37

An appendix to IAS 37 summarises the requirements relating to provisions and contingent liabilities in the form of a flowchart or decision tree. The diagram below is based on the IAS 37 Appendix.





Example

A company is involved in a legal dispute that has not yet been resolved. The company's lawyers have advised that the dispute is more likely to be lost than won, and in the event of defeat, a payment of about \$500,000 in settlement of the dispute should be expected.

The company is preparing its financial statements for the year. The legal dispute began during the year.

Required

- (a) Explain with reasons how this item should be treated in the financial statements of the company.
- (b) Explain how the item would be reported if the company's lawyers advised instead that the dispute was more likely to be won than lost, and in the event of winning, the company could expect to receive about \$300,000 in settlement.



Answer

- (a) The probability is more than 50% that an obligation to make a future payment exists. In accordance with IAS 37, the item should therefore be treated as an actual liability. It will be reported as a provision at the end of the year for \$500,000.
- (b) The probability is more than 50% that a future benefit will be obtained, worth \$300,000. At the same time, there is a possibility of defeat, although this is less than 50% (but presumably higher than 5%). In accordance with IAS 37, the item should therefore be treated as both a contingent asset and a contingent liability. A note explaining the situation in full (and indicating the possible amounts of money involved) should be included with the financial statements of the company.

Practice multiple choice questions

- 1 Should a provision be created in each of the following situations?
 - (1) to provide for future anticipated operating losses of \$100,000
 - (2) to provide for restructuring costs of \$200,000 when the restructuring has been announced to the employees and has been formally planned by the directors.
 - A** Yes in situation 1, No in situation 2
 - B** Yes in situation 1, Yes in situation 2
 - C** No in situation 1, No in situation 2
 - D** No in situation 1, Yes in situation 2

(2 marks)

- 2** A company is facing a legal case for serious injuries supposedly caused by one of its products. The claims total \$1 million of damages.

At 31 December Year 1 the company lawyers believe that it is probable that the company will **not** be found liable, although the likelihood of an obligation arising is stronger than 'remote'. However as the case continued by 31 December Year 2 the lawyer's advice was that the company will probably be found liable.

What is the accounting treatment in the financial statements for each of years 1 and 2?

- A** Ignore in Year 1, disclose a contingent liability in Year 2
- B** Disclose a contingent liability in Years 1 and 2
- C** Disclose a contingent liability in Year 1 and recognise a provision in Year 2
- D** Recognise a provision in Year 1 and continue to recognise it in Year 2

(2 marks)

- 3** Blog is a limited liability company. It has to deal with the following items at the end of its financial year.

- (1) Blog has provided a guarantee for a bank loan to another business entity. The likelihood of a liability actually arising from the guarantee is assessed as 'possible'.
- (2) Blog provides warranties to customers for its products. Experience shows that about 4% of sales give rise to a claim under a warranty.

How should these items be reported (if at all) in the financial statements?

- A** (1) should be disclosed as a contingent liability and a provision should be made for (2).
- B** (1) and (2) should both be treated as provisions.
- C** (1) should not be disclosed at all and a provision should be made for (2).
- D** (1) and (2) should both be treated as contingent liabilities.

(2 marks)

- 4** Which of the following statements are correct about the requirements of IAS37: Provisions, contingent liabilities and contingent assets?

- (1) Contingent assets must not be recognised in financial statements unless an inflow of economic benefits is virtually certain to arise.
- (2) A contingent asset must be disclosed in a note if an inflow of economic benefits is probable.
- (3) No disclosure is required for a contingent liability if the likelihood of a transfer of economic benefits arising is remote.

- A** 1 and 2 only are correct.
- B** 1 and 3 only are correct.
- C** 2 and 3 only are correct.
- D** All three statements are correct.

(2 marks)

- 5** A company is in a legal dispute with a supplier. The supplier is making a claim for losses suffered as a result of an alleged breach of contract by the company. The supplier is claiming \$750,000. The company has denied any liability but has offered \$100,000 as an out-of-court settlement. The company's lawyers have advised that if the case goes to court, the most likely outcome is that the company will lose the case and will be required to pay \$400,000 in compensation to the supplier.
- What amount should be provided in respect of the claim by the supplier?
- A** Nothing, because there is only a contingent liability
 - B** \$100,000
 - C** \$400,000
 - D** \$750,000
- 6** Which of the following statements are correct about provisions and contingent liabilities?
- 1 If it is probable that a liability will occur and result in an outflow of economic benefits, but its value is not certain, a provision should be created.
 - 2 A reduction in a provision increases profit for the year.
 - 3 A provision can be made for future reorganisation costs, but only if certain conditions are met.
 - 4 A provision can be made for future operating losses, but only if certain conditions are met.
- A** 1 and 2 only are correct
 - B** 1, 2 and 3 only are correct
 - C** 1 and 4 only are correct
 - D** 2, 3 and 4 only are correct.

Capital structure and finance costs

Contents

- | | |
|---|---|
| 1 | Limited liability companies and sole traders compared |
| 2 | Share capital and reserves |
| 3 | Issuing shares: rights issues and bonus issues |
| 4 | Preference shares |
| 5 | Dividends |
| 6 | Loans and interest costs |
| 7 | Statement of changes in equity |

Limited liability companies and sole traders compared

- Comparing companies and sole traders
- Advantages and disadvantages of operating as a limited liability company
- Companies and financial reporting

1 Limited liability companies and sole traders compared

1.1 Comparing companies and sole traders

The differences in legal form between a limited liability company and a sole trader's business were described in an earlier chapter. Limited liability companies differ from the businesses of sole traders and partnerships in several ways.

- A company is a legal entity or legal person, separate from its owners. A company can hold assets in its own name and owe money in its own name. It is also liable to tax on the profits that it makes.
- In contrast, a sole trader is the legal owner of any assets of his business. The sole trader is liable for tax on his personal income, including income from his business: the sole trader's business is not itself taxable.
- Companies are managed by a board of directors. In a small company, the owner or owners are likely to be the directors. In larger companies, the directors are not the only owners of the business, and might not have any share in the ownership at all.
- The directors of larger companies should therefore be accountable to the company's owners, the shareholders. One way of making directors accountable is to require them to present financial statements regularly to the owners.
- The owners of a limited liability company are its ordinary shareholders (also called equity shareholders or, in the US, common stockholders). The ownership of a company is represented by a quantity of ordinary shares, and the share of the ownership of each shareholder is proportional to the number of shares that he owns.
- In larger companies, shareholders are not usually involved in the day-to-day operational management of their company.

Limited liability

Limited liability means that the liability of shareholders in their company is restricted to the capital they have invested. Provided that their shares have been paid for in full, they cannot be held liable for any debts or other liabilities that the company incurs. The company itself, as a legal person, is responsible itself and liable for its own debts.

In contrast, the individual sole trader is personally responsible for any debts of the business, and unlike company shareholders does not enjoy 'limited liability'.

1.2 Advantages and disadvantages of operating as a limited liability company

There are advantages and disadvantages in establishing a business as a limited company, rather than as a sole trader's business or a partnership.

- **Limited liability.** As explained above, the personal liability of individual shareholders for the liabilities of their company is restricted to the amount of the investment they have made in the company. This reduces the personal financial risk for the business owners. It is a major reason why there are many small companies.
- **Ownership of the business can be shared** by large numbers of shareholders.
- **Transferring ownership in companies is much easier** than transferring a personal business. Shares can be bought and sold, or transferred as a gift.
- **A company structure is required** for businesses that want to raise capital on a stock market.

There are disadvantages in a company structure, especially for small businesses.

- **Companies are subject to stricter regulation** than sole traders, in matters such as financial reporting and auditing. Extra regulation costs money.
- **If a small company wants to borrow money**, the lender (typically a bank) might demand personal guarantees from the company's owners. If so, the benefits of limited liability are lost.
- **Companies might be required to make their financial statements available** for public inspection, for example by filing a copy with a government department or agency. Sole traders are able to maintain privacy for their financial statements.

There might be tax benefits from operating as a company rather than as a sole trader, or tax benefits from being a sole trader rather than setting up a company. The relative tax benefits are likely to vary from country to country and over time, as the tax laws in a country are altered.

1.3 Companies and financial reporting

Although there are many small companies, and several large partnership businesses, most large businesses are established as companies. The shareholders of companies often rely on financial statements for information about their company.

Companies can also have complex ownership structures, for which special accounting rules are required.

There are also legal requirements that apply exclusively to companies (company law) and not to other types of business. These include regulations relating to the preparation, content and auditing of financial statements. Companies whose shares are traded on a stock market are required to comply with the relevant regulations for stock market trading, which include requirements for compliance with relevant accounting standards in published financial statements.

Consequently, although some international accounting standards can apply to all types of business, many focus on the financial statements of companies.

1.4 The capital of a sole trader

In the financial statements of a sole trader, the equity capital of the owner is recorded in a single capital account.

If the owner puts additional capital into the business, there is an addition to owner's capital, recorded as a credit entry in the capital account.

- Debit: Asset account (Bank account, or an asset account if the owners puts a non-cash asset into the business)
- Credit: Capital

Drawings

If the owner takes drawings, these reduce capital. Initially drawings are recorded in a drawings account, but at the end of the financial year, drawings reduce owner's capital.

If the owner takes out cash:

- Debit: Drawings
- Credit: Bank

If the owner takes out inventory for personal use:

- Debit: Drawings
- Credit: Purchases (at cost)

At the end of the financial year, total drawings are deducted from capital:

- Debit: Capital
- Credit: Drawings

Profits and losses

Profits add to capital and losses reduce capital.

- Debit: Income statement (with profit for the year)
- Credit: Capital

- Debit: Capital
- Credit: Income statement (with loss for the year)

Capital in limited liability companies

The same basic principles apply to capital in limited liability companies. However:

- There are no drawings. Instead the company pays dividends to its shareholders.

- A company does not have a single account for owners' capital. Instead there are a number of different accounts for share capital and reserves.

Share capital and reserves

- Share capital
- Different classes of shares: classes of shares and dividends
- Nominal value of shares
- Share capital: authorised, issued, called up and paid up
- Reserves
- Share premium account
- Bonds

2 Share capital and reserves

The capital of a limited company, as reported in the company's statement of financial position, consists of:

- share capital and
- reserves.

In the main ledger, there are separate accounts for (1) ordinary share capital and (2) each reserve.

2.1 Share capital

The ownership of a company is represented by shares and the owners are called shareholders. Each share of a particular class of shares gives its holder the same rights as every other share in the same class, including the right to receive a dividend.

For example, suppose that one shareholder has 100,000 shares in a company and another shareholder has 1,000 shares of the same class. The shareholders have equal rights to receive dividends on their shares. The first shareholder will receive 100 times more dividends in total than the second shareholder, because he has 100 times more shares.

2.2 Different classes of shares

Many companies have just one class of shares. These are ordinary shares (or 'common stock'). Ordinary shares are **equity shares**, and in the financial statements ordinary shares are shown as part of **equity**.

A company might have other classes of shares called **preference shares** (or 'preferred stock'). Preference shares are described in a later section.

2.3 Nominal value of shares

All shares have a nominal value or face value. (This is not the price at which they are issued, nor their market value.) For example:

- Company A might have 1,000,000 ordinary shares of \$1 each. The nominal value is \$1 per share and the total nominal value of the company's shares is \$1,000,000.
- Company A might issue another 200,000 ordinary shares of \$1 at a price of \$4.50 per share. After the new shares have been issued, the nominal value of the issued shares will be \$1,200,000.
- Company B might have 2,000,000 ordinary shares of \$0.25 each. The nominal value is \$0.25 per share and the total nominal value of the company's shares is \$500,000.

2.4 Share capital: authorised, issued, called up and paid up

There is a difference between authorised and issued share capital.

- The **authorised share capital** of a company is the maximum number of shares that the company is permitted to issue. This maximum limit on share issues is set by the company's constitution. The company cannot issue new shares if the total shares in issue would then exceed the authorised share capital limit. (The requirement that companies should have a stated amount of authorised share capital does not apply in every country. In the UK for example, companies may choose whether or not to have authorised share capital.)
- When a company has an authorised share capital, the authorised share capital limit can be increased but only with the formal approval of the shareholders.
- The **issued share capital** is the nominal value of the shares that have actually been issued. Dividends are paid on issued shares. Issued share capital cannot exceed the authorised share capital.
- When new shares are issued, it is usual to ask shareholders to pay the full issue price immediately, when the shares are issued. Occasionally, a company might ask for the price of the shares to be paid in instalments. The called-up part of the share capital might therefore be less than the full nominal value. The **called-up share capital** is the amount of the nominal value of issued shares that the shareholders have been asked to pay so far.
- **Paid-up share capital** is the amount of called-up capital that has actually been paid by the shareholders. If all the shareholders have not yet paid what they owe for their shares, paid-up share capital is less than the called-up share capital.



Example

A company has authorised share capital of 5 million ordinary shares of \$1 each. It has issued share capital of 4 million shares, all fully paid.

The company decides to issue another 500,000 ordinary shares of \$1, bringing the total issued share capital up to 4,500,000 shares of \$1.

The company might decide to ask for payment for the new shares in instalments, and in the first instalment, the amount called up is \$0.50 for each new share.

The called-up share capital is therefore \$4,250,000 (\$4,000,000 for the existing shares and \$250,000 on the new shares).

Suppose that a shareholder is late in paying the money for 20,000 new shares he is acquiring. The paid-up share capital on the new shares will be \$240,000 ($= \$0.50 \times (500,000 - 20,000)$ shares). Called-up share capital not yet paid is \$10,000 ($= \$0.50 \times 20,000$ shares).

2.5 Reserves

The equity of a company consists of the issued equity share capital plus reserves. Share capital is shown in the statement of financial position at its nominal value (or called-up amount, if this is less). Reserves are the shareholders' capital in the company, in excess of the nominal value of the shares.

In the statement of financial position of a company, equity share capital and reserves might be presented as follows:

	\$000	\$000
Ordinary share capital: 10 million shares of \$1		10,000
Reserves		
Share premium	7,500	
Revaluation reserve	4,000	
Retained earnings	24,500	
		36,000
Total equity capital		46,000

There are two broad categories of reserves in the statement of financial position of a company:

- **Capital reserves:** these are reserves representing long-term capital of the company, from which dividends cannot be paid. Capital reserves include the share premium account and the revaluation reserve. The share premium account is explained below. The revaluation reserve was described in the earlier chapter on non-current assets.
- **Revenue reserves:** these are accumulated retained profits of the company. Revenue reserves can be paid out as dividends, if required. Revenue reserves are usually all included in a single **retained earnings reserve** or **accumulated profits reserve**.

When there is a profit for the year, the accounting entries are:

- Debit: Income statement (profit)
- Credit: Retained earnings reserve

The balance on the retained earnings reserve account is reduced by any **dividends** paid by the company.

- Debit: Retained earnings reserve

- Credit: Dividends
- Debit: Dividends (when the dividends are paid)
- Credit: Bank or Cash.

2.6 Share premium account

When a company issues new shares, the issue price of the shares is usually higher than the nominal value of the shares. The difference between the actual issue price of new shares and their nominal value is called share premium. When new shares are issued, the amount of the share premium is added to a share premium account.

The share premium account is a capital reserve account.



Example

A company issues 80,000 ordinary shares of \$1 each. The issue price of the shares is \$2.50 per share.

The share premium is $\$2.50 - \$1 = \$1.50$ per share, or \$120,000 in total (80,000 shares $\times$ \$1.50).

The company is issuing 80,000 shares to obtain \$200,000 (80,000 $\times$ \$2.50) in cash. In the ledger accounts, the share issue would be recorded as follows:

- Debit: Bank account \$200,000 (80,000 shares $\times$ \$2.50, the cash obtained)
- Credit: Ordinary share capital \$80,000 (80,000 shares at nominal value)
- Credit: Share premium \$120,000

In the statement of financial position, the effect of the share issue is as follows:

	\$
Assets	
Cash	+ 200,000
Equity capital	
Share capital	+ 80,000
Share premium	+ 120,000
	+ 200,000



Exercise 1

A company has in issue 600,000 \$1 ordinary shares which were issued at their nominal value. It decides to issue a further 400,000 \$1 ordinary shares at a price of \$3.20.

What will be the balances on the share capital account and the share premium account after the share issue?

Issuing shares: rights issues and bonus issues

- Rights issues: new share issues for cash
- Advantages and disadvantages of rights issues
- Bonus issue of shares (capitalisation issue)
- Advantages and disadvantages of bonus issues
- Bonus issue and rights issue in the same year

3 Issuing shares: rights issues and bonus issues

3.1 Rights issues: new share issues for cash

Occasionally, a company might issue new shares to obtain cash. An issue of new shares for cash might be in the form of a rights issue.

In a rights issue the existing shareholders have the right to purchase the new shares in proportion to their existing shareholding. For example in a 1 for 3 rights issue, existing shareholders are given the opportunity to buy one new share for every three shares they currently hold.

If existing shareholders do not want to buy the new shares that are offered to them, the shares will be sold to other investors.

When a stock market company makes a rights issue, the price at which the new shares are offered is below the current market price for the shares that are already in issue.



Example

Bunker Company has 4 million shares of \$1 each in issue. These shares are traded on the stock market at a current market price of \$4 each. The company now decides to make a 1 for 4 rights issue at \$3.20 per share.

This means that the company will issue 1,000,000 new shares ($4,000,000 \times 1/4$) at \$3.20 each. The shares will be offered to the existing shareholders, who are given the opportunity to buy one new share for every four shares that they currently own.

The nominal value is \$1 per share, therefore the share premium is \$2.20 per share.

The total amount of cash raised from the share issue is \$3,200,000 ($1,000,000 \text{ shares} \times \3.20).

This should be accounted for as follows:

- Debit: Bank account \$3,200,000
- Credit: Ordinary share capital \$1,000,000 (1,000,000 shares at nominal value)
- Credit: Share premium \$2,200,000 ($1,000,000 \times \2.20).



Exercise 2

A summary balance sheet of Trip Company is as follows:

	\$000
Non-current assets	780
Current assets	170
Total assets	950
Equity and liabilities	
Share capital: ordinary shares of \$0.25 each	200
Share premium	70
Retained earnings	330
Total equity	600
Non-current liabilities	200
Current liabilities	150
Total equity and liabilities	950

The company now makes a 2 for 5 rights issue, and the new shares are issued at a price of \$2.25 each.

Required

Prepare a summary statement of financial position of the company immediately after the rights issue. Ignore the costs of the share issue.

3.2 Advantages and disadvantages of rights issues

Advantages of a rights issue

There are several advantages with issuing shares in the form of a rights issue.

- A rights issue is a method of raising new capital in the form of cash. Companies might need new capital to expand their business.
- Existing shareholders have the opportunity to buy a proportion of the new shares, so that they retain the same proportion of the total shares in the company as before.
- Since the price of the new shares is below the current market price, the issue should be attractive to shareholders.

Note: A country's company law might require new issues of shares for cash to be made as a rights issue, unless the shareholders agree otherwise. (UK company law, for example, gives shareholders these rights.)

Disadvantages of a rights issue

There are also some disadvantages with rights issues.

- A rights issue usually involves raising a large amount of cash. When a company does not need a large amount of cash, it will try to persuade the shareholders to permit a different method of issuing shares to raise the cash required.
- A rights issue might be unsuccessful when the stock market is depressed and share prices are falling.

- A rights issue can be expensive. It is usually cheaper to obtain new finance by borrowing.

3.3 Bonus issue of shares (capitalisation issue)

A bonus issue of shares (also called a capitalisation issue) is an issue of free new shares to existing shareholders in proportion to their existing shareholding. For example, if there is a 1 for 3 bonus issue, shareholders will receive one new share free of charge for every three shares they currently hold.

- The company raises no money from a bonus issue.
- A bonus issue is simply a way of converting reserves into share capital.

A bonus issue is accounted for in the main ledger as follows:

- Debit: Reserves (with the nominal value of the new shares)
- Credit: Ordinary share capital

The reserves are reduced when there is a bonus issue, and the nominal value of the issued share capital is increased.

The reserve that is reduced (debited) is normally the **share premium**. If the share premium is not big enough, it is reduced to zero, and any remaining reduction of reserves is made by reducing retained earnings.



Example

Giveaway Company has 12,000,000 ordinary shares of \$0.50 in issue, and a share premium of \$7,000,000. It decides to make a 1 for 2 bonus issue.

The effect of the bonus issue is as follows:

- The issued share capital before the bonus issue is 12,000,000 shares of \$0.50 = \$6,000,000.
- 6,000,000 new shares are issued ($12,000,000 \times 1/2$). These have a nominal value of \$3,000,000 ($6,000,000 \times \0.50).

	Share capital	Share premium
	\$	\$
Before the bonus issue	6,000,000	7,000,000
Bonus issue	3,000,000	(3,000,000)
After the bonus issue	<u>9,000,000</u>	<u>4,000,000</u>



Exercise 3

A summary balance sheet of Capco Company is as follows:

	\$000
Non-current assets	1,230
Current assets	510
Total assets	1,740
Equity and liabilities	
Share capital: ordinary shares of \$0.25 each	400
Share premium	170
Retained earnings	520
Total equity	1,090
Non-current liabilities	400
Current liabilities	250
Total equity and liabilities	1,740

The company makes a 1 for 2 bonus issue.

Required

Prepare a summary balance sheet immediately after the bonus issue.

3.4 Advantages and disadvantages of bonus issues

Advantages of a bonus issue

A company whose shares are traded on a stock market can use a bonus issue to increase the number of shares in issue. This will bring down the share price and might help to make the shares more marketable.

A bonus issue can be used to reduce the share premium account, or even remove the share premium account entirely from the statement of financial position.

Disadvantages of a bonus issue

Except for the advantages listed above, a bonus issue serves no practical purpose. No cash is raised from the issue.

If a bonus issue exceeds the size of the share premium account, retained earnings will be reduced by the issue. This would convert profits that are distributable as profits into long-term share capital that cannot be distributed.

3.5 Bonus issue and rights issue in the same year

In your examination you might be given a question in which a company makes both a bonus issue and a rights issue in the same year, and you might be asked to calculate the balance on the share capital account and the share premium account after the shares have been issued.

You can work out an answer by preparing a table with a column for the share capital account and a column for the share premium account.

- For a rights issue, calculate the premium per share, which is the difference between the nominal value and the issue price of the shares. The shares might have a nominal value of 25 cents or 50 cents, so be careful when you calculate the premium. Share capital is increased by the nominal value of the shares issued, and the premium is added to the share premium account.
- For a bonus issue, add the nominal value of the share issued to the share capital account and deduct the same amount from share premium.



Example

At 1 July 20X1, HF Company has 20,000,000 ordinary shares of \$0.25 in issue, and a share premium of \$2,000,000.

On 1 December 20X1 the company makes a 1 for 4 bonus issue.

On 1 March 20X2 it makes a 2 for 5 rights issue at a price of \$1.75 per share. All the shares in the issue were taken up by shareholders.

The share capital and share premium account balances at 30 June 20X2 can be calculated as follows

	Share capital	Share premium
	\$	\$
At 1 July 20X1	5,000,000	2,000,000
1 for 4 bonus issue	1,250,000	(1,250,000)
After the bonus issue	6,250,000	750,000
Rights issue (2 for 5: premium \$1.50 per share)	2,500,000	15,000,000
	8,750,000	15,750,000

Note: Before the rights issue there were 25 million shares in issue ($= 6,250,000 \times \$1/\0.25). The number of shares issued in the rights issue is therefore 10,000,000 ($= 25,000,000 \times 2/5$).

These shares have a nominal value of \$2,500,000 and the premium per share is \$1.50 ($= \$1.75 - \0.25) which is \$15,000,000 in total.

Preference shares

- Long-term capital of a company
- The nature of preference shares
- Redeemable and irredeemable preference shares
- Preference shares: equity or debt?

4 Preference shares

4.1 Long-term capital of a company

The long-term capital of a company consists of:

- Equity capital, reported in the statement of financial position as ordinary share capital and reserves
- Preference shares
- Long-term debt.

All companies have equity capital, but not all companies have long-term debt. Even fewer companies have preference shares.

4.2 The nature of preference shares

A company might issue preference shares. There might be just one 'class' of preference shares, but there might also be more than one 'class'.

Preference shares have some similarities with ordinary shares. The main point of similarity is that preference shareholders receive dividends each year on their shares.

However, preference shares differ from ordinary shares because they give their holders preferential rights, ahead of ordinary shareholders. This includes the right to receive dividends on their shares before dividends can be paid to the ordinary shareholders.

The dividend on preference shares is usually a fixed amount each year. This fixed amount is a percentage of the nominal value of the shares.



Example

A company might have in issue 20 million 6% preference shares of \$1 each.

The total annual dividend payable (which is called a 'preference dividend') is \$1,200,000. This is because the nominal value of the shares is \$20 million and dividends are 6% of the nominal value.

Preference dividends are normally paid every six months, so in this example the company would make two preference dividend payments each year of \$600,000.

4.3 Redeemable and irredeemable preference shares

Most classes of preference shares are either redeemable or irredeemable. (There are also convertible preference shares, but these are not included in the syllabus for the examination.)

- Redeemable preference shares will be bought back by the company at a date in the future, and cancelled. When a company buys back and cancels shares, the shares are 'redeemed'. Shares might be redeemed at their nominal value (par value) but the redemption price might be higher.
- Irredeemable preference shares will not be redeemed. Like ordinary shares, they are 'permanent' share capital.

In practice most preference shares issued by companies are redeemable.



Example

A company might have two classes of preference shares in issue. There might be 5% redeemable preference shares and 7.5% irredeemable preference shares. The redeemable preference shares might be redeemable at par at a specified date in the future. When the redemption date arrives the company will buy back the shares and cancel them.

For the purpose of financial reporting, each different class of preference shares should be accounted for separately.

4.4 Preference shares: equity or debt?

Companies are required to show equity capital separately from liabilities in the statement of financial position. Long-term debt is a non-current liability.

There is no special place in the statement of financial position for preference shares, and preference shares must be classified either as equity or as debt. The rules for deciding whether preference shares are equity or debt are fairly complex, but as a general rule:

- redeemable preference shares are usually treated as debt capital in financial reporting
- irredeemable preference shares are likely to be included in equity.

A consequence of treating preference shares as either equity or debt capital, depending on circumstances, the dividends paid to preference shareholders are also treated in one of two ways:

- When preference shares are treated as debt capital and included in non-current liabilities, dividends paid to the preference shareholders are reported as a finance cost in the income statement, similar to interest costs on a loan. These preference dividends reduce the reported profit.
- When preference shares are treated as equity, dividends paid to the shareholders are treated as equity dividends. Accounting for equity dividends is explained later.

Dividends

- Preference dividends
- Equity dividends
- Accounting for equity dividends

5 Dividends

5.1 Preference dividends

A company does not have to pay dividends. If its profits are too low, the directors might decide not to pay any dividend, or to pay just some dividends to some classes of shareholders.

Preference shareholders are entitled to receive their dividend before the ordinary shareholders can receive any dividend.

As stated in the previous section, preference dividends are reported differently in the financial statements, depending on whether the preference shares are treated as debt capital or equity capital.

- When preference shares are treated as debt capital, the preference dividend each year is reported as a finance charge and included in profit and loss for the year.
- When preference shares are treated as equity, the preference dividends are included within the equity dividend for the purpose of financial reporting.

Accounting for preference dividends

When preference dividends are treated as a finance cost, they are accounted for as follows:

- Debit: Preference dividends
- Credit: Bank

Dividend payment

- Debit: Finance charges (expense)
- Credit: Preference dividends

Recording preference dividends as a finance charge (expense in profit and loss) for the year

5.2 Equity dividends

Equity dividends are dividends paid to the equity shareholders. In most companies, the ordinary shareholders are the only equity shareholders. Dividends are usually stated at an amount per share: for example a company might make a dividend payment of 60 cents per share.

Equity dividends reduce the company's distributable profits. When a company pays an equity dividend, the balance on the retained earnings reserve is reduced.

Interim and final dividends

Many companies make two (or possibly more) dividend payments each year to the ordinary shareholders.

- There might be a payment during the financial year, based on profits for the first six months of the year. This mid-year dividend is called an interim dividend.
- There is usually a payment after the end of the financial year, based on profits for the full year. This is called a final dividend.

The timing of equity dividend payments needs to be understood, and so it might be useful to describe an example. Suppose that a company has a financial year that ends on 31 December.

- In July Year 1 it might declare an interim dividend of 30c per share, payable on 31 October Year 1.
- In February Year 2, it might propose a final dividend of 95c per share for the year ended 31 December Year 1. This proposed dividend is therefore announced before the financial statements for Year 1 are approved by the company's directors and published.
- The proposed dividend might require approval by the shareholders at an annual general meeting of the company, held in April Year 2.
- The final dividend for Year 2 might be paid on 15 May Year 2.
- In July Year 2 the company might declare an interim dividend of 33c per share, payable on 30 October Year 2.

The important points to note about this timetable for dividends are that:

- During the course of a financial year, a company might make two payments of equity dividends, the final dividend for the previous financial year and the interim dividend for the current financial year.
- When a company publishes its financial statements for a year, the directors might have proposed a final dividend for the year, but this proposed dividend will not yet have been approved by the shareholders.

A distinction must be made between:

- equity dividends actually paid in the year
- the proposed equity dividend that has not yet been paid when the financial statements are prepared and published.

5.3 Accounting for equity dividends

Equity dividends are not included in the income statement of a company or in the statement of comprehensive income. Instead:

- **Equity dividends actually paid** during the year are reported as a reduction in retained earnings in the statement of changes in equity (which is explained

later). Equity dividend payments also reduce retained earnings in the statement of financial position.

- The **proposed final dividend** is reported as a note to the financial statements, but is not included in the income statement, statement of changes in equity or the statement of financial position.

The accounting entries for equity dividends are therefore as follows.

- Debit: Equity dividends
- Credit: Bank

Dividend payments

- Debit: Retained earnings reserve
- Credit: Equity dividends

Recording equity dividend payments as a deduction from retained earnings.

Accounting for equity dividends: summary

Dividends paid to equity shareholders are similar to drawings made by sole traders or partners from their capital. Dividends are paid out of revenue reserves (the retained earnings reserve account).

A dividend is usually declared as either:

- a dividend per share in cents per share, or
- a percentage of the nominal value of the shares.

In the UK, dividends are usually paid twice each year. During a financial year, the amount of dividend charged against retained earnings is therefore:

- the final dividend for the previous year and
- the interim dividend for the current year.

The accounting rules for dividends can be summarised as follows.

- **Total dividends paid are not shown in the income statement**, as part of the income statement itself.
- The **proposed final dividend** for the accounting year is not shown in the statement of financial position, **unless** (in a very unusual circumstance) the final dividend is proposed and approved before the end of the financial year.
- Total dividends actually paid during the year (the final dividend for the previous year and the interim dividend in the current year) are reported as deductions from equity (deductions from retained earnings) in another financial statement, the **statement of changes in equity** (see later in this chapter).
- The final proposed dividend for the year, if it is proposed after the end of the year (which is the normal practice), is disclosed in a note to the financial statements, as a non-adjusting event after the reporting date (see later chapter).



Example

A company has 2,000,000 ordinary shares of \$0.50 each in issue. At the beginning of Year 2, its accumulated profits were \$450,000.

Its profit before taxation for Year 2 was \$300,000. Taxation on these profits is \$90,000. During the year, the company:

- paid a final dividend for the previous financial year (Year 1) of 7 cents per share
- paid an interim dividend for the current financial year (Year 2) of 3 cents per share

Profit for the year

	\$
Profit before taxation	300,000
Taxation	90,000
Profit after taxation (credit retained earnings reserve)	<u>210,000</u>

Retained earnings reserve

	\$	\$
Balance at the beginning of the year		450,000
Profit after taxation for Year 1		210,000
		<u>660,000</u>
Equity dividend payments		
Final dividend for Year 1 (2,000,000 × \$0.07)	140,000	
Interim dividend for Year 2 (2,000,000 × \$0.03)	<u>60,000</u>	
		<u>200,000</u>
Balance at the end of the year (statement of financial position)		<u>460,000</u>

Loan capital

- Features of loans and loan notes
- Accounting for loans and loan notes

6 Loan capital

6.1 Features of loans and loan notes

'Loan capital' is long-term borrowing. A loan is a liability, and is included in non-current liabilities in the statement of financial position provided that repayment of the loan will not fall due within the next 12 months.

Loan capital takes two main forms:

- bank loans
- loans in the form of a borrowing instrument, such as bonds or notes.

Longer-term bank loans to business entities are usually at a variable rate of interest, so the interest rate payable on the loan rises or falls with changes in the market rates of interest.

Bonds and notes are financial instruments issued by companies that enable them to borrow from investors. Companies issue bonds or notes and these are purchased by investors. In return the company promises to:

- pay interest on the face value of the bonds or notes and
- redeem the bonds or notes at a date in the future.

Interest is usually at a fixed annual rate of interest.

The difference between bonds and loan notes is the time to redemption when they are issued. Loan notes are usually redeemable within up to about seven years from the date of their issue. Bonds are usually longer-term and redeemable after ten years or more.

6.2 Accounting for loans and loan notes

The rules on accounting for financial instruments are fairly complex, and the complexities are outside the scope of the examination syllabus. For the purpose of your examination, you need to be aware that:

- Loan capital is a long-term liability, and is included in the statement of financial position within non-current liabilities. However when the bank loan, loan notes or bonds are redeemable within 12 months, they become current liabilities.
- The interest on loans and loan notes is an expense in profit and loss, and included within finance costs. The accruals basis is applied, which means that

interest is charged against profit on a time apportionment basis, not on the basis of when the interest payments are actually made.



Example

A company issued loan notes on 1 May. The notes have a face value of \$15 million and interest is payable at an annual rate of 8%. Interest payment dates are six-monthly. On 31 October and 30 April each year. The interest rate of 8% is a market rate of interest and the loan notes are redeemable a par after five years.

The financial year of the company ends on 31 December.

The loan notes should be accounted for in the year of issue as follows.

- Interest to be included in interest costs/finance costs for the year is \$15 million $\times$ 8% $\times$ (8 months/12 months) = \$800,000.
- There is a non-current liability for \$15 million (the amount of the loan).
- There is accrued interest for two months (November and December) amounting to \$15 million $\times$ 8% $\times$ (2 months/12 months) = \$200,000. This will be included in current liabilities in the statement of financial position as at 31 December.

In the ledger accounts, the transactions might be recorded as follows. These show liabilities for the loan (\$15 million) and accrued interest (\$200,000) at the end of the year.

Loan notes account					
			\$		
			1 May	Bank	\$ 15,000,000
Interest charges account					
			\$		
31 Oct	Bank	600,000	31 Dec	Income statement	\$ 800,000
31 Dec	Accrual c/f	200,000			

Statement of changes in equity

- The requirement for a statement of changes in equity
- Components of equity
- Transactions with owners in their capacity as owners

7 Statement of changes in equity

7.1 The requirement for a statement of changes in equity

A set of financial statements for a company must include a statement of changes in equity (SOCIE) in order to comply with the requirements of IAS1: **Presentation of financial statements**. The SOCIE is a part of the financial statements of a company, together with the statement of financial position, statement of comprehensive income, statement of cash flows and notes to the financial statements.

For each 'component of equity', a SOCIE shows the amount at the beginning of the period for that component of equity, changes during the period, and its amount at the end of the period.

The purpose of the statement is simply to show how the total amount of equity has changed during the year, and which parts of equity have increased or decreased in amount, and by how much.

7.2 Components of equity

Components of equity include:

- share capital
- share premium
- retained earnings
- revaluation reserve.

In other words the components of equity are share capital and each equity reserve.

For each component of equity, the **SOCIE should show changes resulting from:**

- profit or loss for the period
- each item of other comprehensive income (e.g. a gain on a property revaluation)
- 'transactions with owners in their capacity as owners'.

7.3 Transactions with owners in their capacity as owners

The owners of a company are its shareholders. Transactions with owners in their capacity as owners include:

- new issues of shares
- payments of equity dividends
- repurchases and cancellations of its own shares by the company.

Transactions with owners in their capacity as owners do not appear in any other financial statement as separately identified items or transactions. Equity dividend payments reduce total retained earnings, but they are not shown in the statement of financial position or income statement. Similarly, the proceeds from new share issues add to share capital and share premium, but they are not separately disclosed in the statement of financial position.

It is only in the SOCIE that these items are disclosed as separate items.



Example: statement of changes in equity

An example of a statement of changes in equity for a single entity is shown below.

Company XYZ

Statement of changes in equity for the year ended 31 December 20X2

	Share capital	Share premium	Revaluation reserve	Retained earnings	Total
	\$000	\$000	\$000	\$000	\$000
Balance at 31 December 20X1	500	160	140	800	1,600
Change in accounting policy	-	-	-	(50)	(50)
Re-stated balance	500	160	140	750	1,550
Changes in equity for 20X9					
Issue of share capital	200	250			450
Dividend payments				(280)	(280)
Profit for the year				420	420
Other comprehensive income for the year			30		30
Balance at 31 December 20X2	700	410	170	890	2,170

Notes

The SOCIE shows the changes during the year for each component of equity, having first made a retrospective adjustment for the effects of a change in accounting policy (in the rare event that this occurs) or for the correction of a prior period error.

Changes in each component of equity are shown, with separate disclosure of changes resulting from profit or loss, other comprehensive income, and 'transactions with owners in their capacity as owners' – new share issues and dividend payments are shown here.

The SOCIE therefore reconciles, for each component of equity, the balance at the beginning of the period and the balance at the end of the period.



Example

Green Company had the following equity and reserves at 1 January Year 7:

	\$000
Share capital: ordinary shares of \$1 each	480
Share premium	120
Revaluation reserve	80
Retained earnings	920
Total equity	<u>1,600</u>

During the year to 31 December Year 7:

- The company made a 1 for 4 rights issue at a price of \$2.50 per share.
- The company then made a 1 for 3 bonus issue.
- Some buildings were re-valued and the transfer to the revaluation reserve was \$140,000. This was reported in other comprehensive income for the year.
- The profit after tax for the year was \$600,000.
- Equity dividend payments during the year were \$510,000.

Required

Prepare a statement of changes in equity for Green Company for the year to 31 December Year 7, to include in its financial statements for the year.



Answer

	Share capital	Share premium	Reval'n surplus	Retained earnings	Total
	\$000	\$000	\$000	\$000	\$000
At 1 January Year 7	480	120	80	920	1,600
Rights issue of shares	120	180			
Bonus issue of shares	200	(200)			
Equity dividends paid				(510)	(510)
Profit for the year after tax				600	600
Other comprehensive income: gain on revaluation of property			140		140
At 31 December Year 7	<u>800</u>	<u>100</u>	<u>220</u>	<u>1,010</u>	<u>2,130</u>

	\$
Net gains not recognised in the income statement:	
Gain on revaluation of property	50
Net profit for the period	100
Total recognised income and expenses	150



Exercise 4

A company had the following equity and reserves at 1 January Year 3:

	\$000
Share capital: ordinary shares of \$1 each	500
Share premium	100
Revaluation reserve	120
Retained earnings	480
Total equity	1,200

During the year to 31 December Year 3:

- The company made a 1 for 5 rights issue at a price of \$2.20 per share.
- The company then made a 1 for 3 bonus issue.
- Some buildings were re-valued and the transfer to the revaluation reserve was \$100,000.
- The profit after tax for the year was \$400,000.
- Dividend payments during the year were \$200,000.

Required

Prepare a statement of changes in equity for the company for the year to 31 December Year 3.

Practice multiple choice questions

- 1 Which of the following items should appear as items in a company's statement of changes in equity?
- 1 Equity dividends paid
 - 2 Income from investments
 - 3 Profit for the financial year after tax
 - 4 Gain on revaluation of non-current assets
- A** 1, 3 and 4 only
B 1 and 3 only
C 2 and 3 only
D 2, 3 and 4 only
- (2 marks)**

- 2** The following information relates to dividends declared and paid by a company, whose financial year ends on 30 June.

2009		\$
November	Paid final dividend for year ended 30 June 2009. (Declared August 2009)	800,000
2010		
April	Paid interim dividend	200,000
November	Paid final dividend for year ended 30 June 2010. (Declared August 2010)	900,000

What figures (if any) should be included in the income statement of the company for the year to 30 June 2010 and in the statement of financial position as at that date?

	Income statement	Statement of financial position: liability	
A	\$1,100,000 deduction	\$900,000	
B	\$1,000,000 deduction	Nothing	
C	Nothing	\$900,000	
D	Nothing	Nothing	(2 marks)

- 3** Which of the following statements are correct?

- 1 When a company makes a bonus issue of shares, the total of share capital plus reserves remains unchanged.
 - 2 A company's statement of changes in equity must include the proceeds from any share issue during the period.
- A** 1 only is correct
B 2 only is correct
C 1 and 2 are both correct.
D Neither statement is correct. **(1 mark)**

- 4** At 1 July 2009 a limited liability company's capital structure was as follows:

	\$000
Share capital: Ordinary shares of \$1 each	200,000
Share premium account	160,000

In the year ended 30 June 2010 the company made the following share issues.

1 December 2009

A bonus issue of one share for every two held, using the share premium account.

1 February 2010

A rights issue of two shares for every five held at that date, at \$2 per share.

What will be the balances on the company's share capital and share premium accounts at 30 June 2010 as a result of these issues?

	Share capital	Share premium	
	\$000	\$000	
A	420,000	180,000	
B	420,000	120,000	
C	540,000	60,000	
D	540,000	160,000	(2 marks)

- 5** A limited liability company issued 400,000 ordinary shares of 50c each at a premium of \$2 per share. The cash proceeds were correctly recorded but the full amount was credited to the sales account.

Which of the following journal entries is needed to correct this error?

	Debit	Credit	
	\$	\$	
A			
Sales	1,000,000		
Share capital account		200,000	
Share premium account		800,000	
B			
Share capital account	200,000		
Share premium account	800,000		
Sales		1,000,000	
C			
Sales	1,000,000		
Share capital account		1,000,000	
D			
Share capital account	1,000,000		
Sales		1,000,000	(2 marks)

Trial balance, correcting errors and suspense accounts

Contents

- | | |
|---|--|
| 1 | Trial balance |
| 2 | Correcting errors |
| 3 | Suspense accounts |
| 4 | Identifying errors in double entry records |

Trial balance

- The purpose of a trial balance
- Errors in the double entry accounting system
- Errors highlighted by the extraction of a trial balance
- Errors not highlighted by the extraction of a trial balance

1 Trial balance

1.1 The purpose of a trial balance

A trial balance is a list of all the debit balances and all the credit balances on the accounts in the main ledger. A trial balance can be 'extracted' from the main ledger simply by listing the balances on every account. The normal method of presentation is to present the balances in two columns, one for debit balances and one for credit balances.

- Accounts with debit balances will be asset accounts and expense accounts
- Accounts with credit balances will be liability accounts, capital account (or share capital and reserve accounts in the case of a company) and income accounts.

Since the accounting system uses double entry principles, the total of debit balances and the total of credit balances should be equal, because for every debit entry in the main ledger there should be a matching credit entry.

A trial balance has two main purposes.

It is a **starting point for producing an income statement and a statement of financial position** at the end of an accounting period. A trial balance is extracted from the main ledger, and various year-end adjustments are then made to the accounts (which are recorded as journal entries before being entered in the main ledger). Year-end adjustments include adjustments for opening and closing inventory, depreciation charges, accruals and prepayments, writing off bad debts and adjusting the allowance for irrecoverable debts.

When the year-end adjustments have been made, an income statement and then a statement of financial position can be prepared, using the balances in the main ledger accounts.

A second purpose of a trial balance is **to check for errors in the accounting system**. Errors must have occurred if the total of debit balances and total of credit balances on the main ledger accounts are not equal. Having identified that an error (or more than one error) must exist, the task of the bookkeeper is to find the cause of the error and correct it.

This chapter is concerned with the use of a trial balance for identifying and then correcting errors. When a trial balance is used to identify errors in the accounting

system, a trial balance can be extracted at any time, because total debit balances and total credit balances should always be equal.

1.2 Errors in the double entry accounting system

Errors can occur in a book-keeping system, because individuals make mistakes. There are different types of error. Some are more likely to happen in a manual accounting system rather than a computerised system, because people tend to make more mistakes when they do not have a computer to help them. However some mistakes occur in any book-keeping system, manual or computerised.

The types of error that will appear in the accounting records can be classified into four broad categories:

- **Errors of transposition.** This is getting the digits in a number the wrong way round, such as recording \$970 as \$790. Sometimes the error will be made in both the debit and the credit entries in the ledger: for example a purchase invoice might be recorded as \$1,650 instead of \$1,560 in both the purchases account and the payables ledger control account. However, sometimes the error of transposition will be made in one account but not the other; for example, a payment of \$1,980 from a customer might be recorded correctly in the cash book but posted incorrectly as \$1,890 in the receivables ledger control account.
- **Errors of omission.** This is where a transaction or entry is missed out. Sometimes a transaction is missed out of the ledger entirely because the bookkeeper forgets about it or is not informed about it.
- **Errors of commission.** This means putting an entry in the wrong account, for example recording a telephone expense in the electricity expenses account. Similarly, discounts received might be recorded incorrectly in the discounts allowed account.
- **Errors of principle.** This is where an entry is recorded in the wrong type of account, e.g. recording capital expenditure as revenue expenditure. In the examination, you might be given a problem where a capital transaction (the purchase of a non-current asset) is recorded as a revenue expense. For example the purchase of a machine might be entered in the machinery repairs and maintenance account. Unless corrected, this error will result in an incorrect computation of depreciation charges, running costs and profit for the period.

1.3 Errors highlighted by the extraction of a trial balance

As stated earlier, one way of finding some errors in the accounting records is to extract a trial balance from the main ledger. If the total of the debit balances does not equal the total of the credit balances on the main ledger accounts then an error or several errors have been made.

If the trial balance does not balance then this will be due to an error where the debits and credits are not the same, so that the error results in the debit entry in one account in the main ledger not being equal to the matching credit entry in another account.

Types of error which affect the balancing of the trial balance are as follows:

- A transaction might be recorded with a debit entry in one account, but the corresponding credit entry is omitted. Similarly, a transaction might be recorded with a credit entry in one account, but the corresponding debit entry is omitted. For example a payment might be recorded as a credit entry in the cash book but omitted from the payables ledger control account.
- There could be a transposition error in one account. For example, the debit entry might be \$1,234 and the corresponding credit entry might be \$1,324. One of the entries must be incorrect.
- A transaction might be recorded as a debit entry in two accounts, instead of as a debit entry in one account and a credit entry in the other account. For example, rental income might be recorded as a debit entry in the cash book and, in error, as a debit entry in the rental expense account.
- Similarly, a transaction might be recorded as a credit entry in two accounts, instead of being a debit entry in one account and a credit entry in the other. For example, discounts allowed might be recorded as a credit entry in the receivables ledger control account and, in error, as a credit entry in the discounts received account.
- The cash book is often used as both a book of prime entry and as a main ledger account ('cash' or 'bank'). In a manual accounting system, the total of cash receipts or cash payments on a page of the cash book is added up and the total amount of cash received or cash paid is then 'posted' to the corresponding main ledger account (such as receivables ledger control account or payables ledger control account). When a total column in the cash book is added up incorrectly, the total is said to be '**undercast**' if it is too low or '**overcast**' if it is too high. Arithmetical errors that result in an undercast or overcast results in the balance on an account being too high or too low. When a trial balance is extracted, total debits and total credits will therefore be different.

1.4 Errors not highlighted by the extraction of a trial balance

A trial balance is only useful in helping to identify errors where the debit and credit entries in the main ledger accounts do not match. It does not help with the identification of errors where there has not been a mismatch between debit and credit entries.

There are some types of error that do not result in a difference between total debit and total credit entries and therefore do not affect the balancing of the trial balance. For example:

- A transaction might have been omitted entirely from the main ledger, with no debit entry and no credit entry.
- Transactions might be recorded in the wrong account. For example, the cost of repairing a machine might be recorded incorrectly as a debit in the machinery at cost account instead of recording it as a debit in the machine repairs account. The amount of the debit entry is correct; the error is to post the transaction to the wrong account.
- There might be compensating errors. For example one error might result in debits exceeding credits by \$2,000 but another error might result in credits exceeding debits by \$2,000. If this happens, the errors will 'cancel each other out'

and will not be apparent from a check on the trial balance totals for debits and credits.

Since a trial balance cannot be used to identify the existence of all errors, it has serious limitations as a method of identifying and correcting errors.

For the purpose of your examination, however, you need to be able to:

- identify errors in a double entry accounting system, and
- know how to correct them.

Corrections to errors in an accounting system are recorded as journal entries and then posted from the journal to the relevant accounts in the main ledger.

Correcting errors

- An approach to correcting errors
- The effect of errors on profit

2 Correcting errors

2.1 An approach to correcting errors

Errors should be corrected when they are found.

- Transactions that have been omitted from the main ledger entirely should be recorded in the accounts. The omitted item can be recorded in the journal, and posted from the journal to the relevant accounts in the main ledger and, if required, the receivables or payables ledger.
- Entries that have been made incorrectly in the accounts must be corrected by means of suitable debit and credit entries in the accounts. The correction of an error should be recorded in the journal and then posted from the journal to the relevant accounts.

In order to correct errors properly, you need to be able to:

- identify an error
- recognise what the correct entry in the accounts should have been and
- work out how to make the correction by means of double entry adjustments.

One approach to correcting errors is to use memorandum T accounts. For each account affected by an error, you can prepare two sets of memorandum T accounts for:

- (1) What accounting entries have been made in the accounts, and
- (2) What the accounting entries should have been.

By comparing what has been recorded in the accounts with what should have been recorded, you can then work out the double entry adjustments that are needed to get from 'where we are' to 'where we want to be'. Some examples will help to illustrate the approach.



Example

A business has recorded a repair cost of \$1,500 to a machine as a debit in the machinery at cost account.

If you cannot see immediately what double entry adjustments are needed to correct the error, you could prepare the following memorandum accounts.

(1) What has been recorded

Machinery (at cost) account	
Dr	Cr
15,000	

Machine repairs account	
Dr	Cr
0	

(2) What should have been recorded

Machine (at cost) account	
Dr	Cr
0	

Machine repairs account	
Dr	Cr
15,000	

The machinery (at cost) account has a debit entry of \$15,000 when there should be nothing in the account for the transaction. To remove this error and reduce the account balance to \$0 for the transaction, we need to credit the machine (at cost) account with \$15,000.

The machine repairs account has nothing recorded for the transaction, but there should be a debit balance of \$15,000. To correct his account, we need to debit the account with \$15,000.

To correct the error, the required double entry is:

- Debit: Machine repairs \$15,000
- Credit: Machinery (at cost) account \$15,000.

**Example**

A business has recorded discounts allowed of \$2,600 as a debit in the discounts received account.

If you cannot see immediately what double entry adjustments are needed to correct the error, you could prepare the following memorandum accounts.

(1) What has been recorded

Discounts allowed account	
Dr	Cr
0	

Discounts received account	
Dr	Cr
2,600	

(2) What should have been recorded

Discounts allowed account	
Dr	Cr
2,600	

Discounts received account	
Dr	Cr
0	

The discounts allowed account has nothing recorded for the transaction, but there should be a debit balance of \$2,600. To correct his account, we need to debit the account with \$2,600.

The discounts received account has a debit entry of \$2,600 when there should be nothing in the account for the transaction. To remove this error and reduce the

account balance to \$0 for the transaction, we need to credit the discounts received account with \$2,600.

To correct the error, the required double entry is:

- Debit: Discounts allowed account \$2,600
- Credit: Discounts received account \$2,600.

2.2 The effect of errors on profit

Unless they are corrected, accounting errors will have an effect on the reported profit for the period. An examination question might ask you to quantify this effect for a given error. In a typical question of this sort, the error might involve recording a capital expenditure item as a revenue expenditure item, or a revenue expenditure item as capital expenditure. Alternatively, a capital expenditure item might be recorded at an incorrect amount.



Example

A bookkeeper in error recorded the purchase cost of a new item of equipment as \$3,600 when it should have been \$36,000.

A draft profit of \$256,000 for the period was calculated before the discovery of the error. This included a depreciation charge of 10% (\$360) for the equipment.

What is the correct figure for profit?



Answer

	\$
Draft profit	256,000
Add back: Depreciation incorrectly charged	360
	256,360
Deduct: Correct depreciation charge (10% × \$36,000)	(3,600)
Adjusted figure for profit	252,760



Example

A bookkeeper in error recorded the \$60,000 purchase cost of a new machine as repairs and maintenance costs

A draft profit of \$300,000 for the period was calculated before the discovery of the error. Depreciation on machinery is charged at 20% on cost, with a full year's charge in the year of acquisition.

What is the correct figure for profit?

a**Answer**

	\$
Draft profit	300,000
Add back: Repair costs incorrectly charged	60,000
	<u>360,000</u>
Deduct: Depreciation charge ($20\% \times \$60,000$)	(12,000)
Adjusted figure for profit	<u>348,000</u>

Suspense accounts

- Trial balance: differences in total debits and total credits
- Opening a suspense account
- Correcting errors where a suspense account is opened
- Unknown entry

3 Suspense accounts

3.1 Trial balance: differences in total debits and total credits

The examples of correcting errors in the previous section involve errors where the amount of the debit entry and the amount of the credit entry were the same. These errors would not be identified by extracting a trial balance.

When errors are made where the amount of the debit entry differs from the amount of the credit entry, total debit balances and total credit balances in the main ledger accounts will differ. A trial balance of all the accounts in the main ledger will show these different amounts. It will also indicate that there is an error, or possibly several errors, in the accounting records.

These must be discovered and corrected. Until they are discovered, the first step should be to open a **suspense account**.

- When errors have resulted in total debit entries and total credit entries being different, the errors are corrected using the suspense account.
- A suspense account is a short-term T account that is required only until the errors have been identified and corrected.

3.2 Opening a suspense account and correcting the errors

When a suspense account is opened, an opening balance is entered in the account. This can be either a debit balance or a credit balance.

The balance entered into the suspense account should be an amount that makes equal the total debit balances and the total credit balances on all the main ledger accounts (including the balance on the suspense account).



Example

A business has prepared a trial balance of the main ledger account balances. This shows total debit balances of \$456,000 and total credit balances of \$488,000. A suspense account must be opened. The balance on the account to make total debit and total credit balance equal is a debit balance of \$32,000 (\$488,000 credits less \$456,000 debits).

Suspense account		
	\$	\$
Opening balance	32,000	

The errors should now be investigated, to find out what they are, and what must be done to correct them. The errors have not been fully corrected until the balance on the suspense account has been reduced to zero.

3.3 Correcting errors where a suspense account is opened

When it is clear that an error has occurred, it is often helpful to decide the answer to two questions:

- Has the error resulted in different total amounts for debit and credit entries?
 - If the answer is yes, making the correction will involve the suspense account
 - If the answer is no, the correction should be made, but will not involve the suspense account
- If the error has resulted in different total amounts for debit and credit entries, think about the main ledger account or accounts containing the error, and decide what needs to be done to correct the balance on that account.

The same approach used in the previous section for correcting errors can be used. For each account affected by an error, you can prepare two sets of memorandum T accounts for:

- (1) What accounting entries have been made in the accounts, and
- (2) What the accounting entries should have been.

By comparing what has been recorded in the accounts with what should have been recorded, you can then work out the double entry adjustments that are needed to get from 'where we are' to 'where we want to be'.

However, when the error involves different total amounts of debits and credits, a debit or credit entry in the suspense account is needed as a 'balancing figure' to make the total debits and credits equal. Correcting the error(s) should reduce the balance on the suspense account to \$0.



Example

A debit entry in the rent expense account has been entered as \$5,000 when it should have been \$5,500, but the entry in the cash book (bank account) for the payment was entered correctly as \$5,500.

The debit entry in the rent account is \$500 too low, resulting in a difference between total debits and total credits. The first step is to open a suspense account and enter a balance to make total debits and total credits equal.

Suspense account	
Opening balance	\$ 500
	\$

We can now look at 'where we are' and 'where we want to be'

(1) What has been recorded

Rent expense account	
Dr	Cr
5,000	

Suspense account	
Dr	Cr
500	

(2) What should have been recorded

Rent expense account	
Dr	Cr
5,500	

Suspense account	
Dr	Cr
0	

The correction is made by entering \$500 as a debit in the rent expense account. The matching double entry is to the suspense account (in this example, a credit entry of \$500 in the suspense account).

Suspense account	
Opening balance	\$ 500
	Rent account
	\$ 500

Rent expense account	
Opening balance	\$ 5,000
Suspense account	\$ 500



Example

A discount allowed of \$4,000 (expense) has been recorded as a credit entry in the discount received account (an income account) by mistake.

(1) What has been recorded

Discounts allowed account	
Dr	Cr
0	

Discounts received account	
Dr	Cr
	4,000

(2) What should have been recorded

Discounts allowed account	
Dr	Cr
4,000	

Discounts received account	
Dr	Cr
	0

As a result of this error, total credits are \$4,000 higher than they should be, and total debits are \$4,000 lower than they should be. This error is corrected as follows, with an entry in the suspense account to match total debits with total credits:

Journal entry	Debit	Credit
	\$	\$
Discounts received	4,000	
Discounts allowed	4,000	
Suspense account		8,000
= Correction of error		

Both the discounts allowed account and the discount received account must be corrected.

- The discounts received account should not have been credited with \$4,000. To correct the error, there must be a debit entry of \$4,000 in the account.
- The discounts allowed account (an expense account) should have been debited with \$4,000.
- The corrections in these two accounts are balanced by a credit entry for \$8,000 in the suspense account.

In the main ledger:

Suspense account	
\$	\$
	Discounts allowed/received 8,000

Discounts received account	
\$	\$
Suspense account 4,000	

Discounts allowed account	
\$	\$
Suspense account 4,000	



Example

A payment to a supplier of \$23,500 has been recorded in the cash book/bank account in the main ledger, but has not been recorded in the trade payables account. As a result, total credits exceed total debits in the trial balance by \$23,500 and a suspense account must be opened with a debit balance of \$23,500.

(1) What has been recorded

Trade payables account	
Dr	Cr
0	

Suspense account	
Dr	Cr
23,500	

(2) What should have been recorded

Trade payables account	
Dr	Cr
23,500	

Suspense account	
Dr	Cr
0	

This error would be corrected as follows.

Journal entry	Debit	Credit
	\$	\$
Trade payables	23,500	
Suspense account		23,500
Correction of error		



Exercise 1

A trial balance has been prepared, and total debits are \$459,100 and total credits are \$459,700.

On investigation, the following errors are found:

- Sales returns of \$800 were recorded correctly in the receivables account in the main ledger, but they have been recorded incorrectly as a credit entry in the purchases returns account.
- In the sales day book, the column for total sales excluding sales tax has been added up incorrectly. The total should be \$26,420, but the total was undercast by \$1,000. (The total was added up as \$25,420). The correct total amount receivable was entered in the receivables account in the main ledger.

Required

Open a suspense account and record the book-keeping entries required to correct the errors.

3.4 Unknown entry

We have seen that a suspense account is opened in order to make a trial balance have equal debits and credits until the errors have been discovered. In some instances however a suspense account will be opened deliberately by the bookkeeper if the bookkeeper is uncertain of where to post one side of the double entry.



Example

A bookkeeper has received a cheque for \$1,000 but does not know who the cheque is from or what it relates to. Rather than putting the cheque to one side until it is known what it is for the bookkeeper may decide to record the debit entry in the cash book/bank account and then, not knowing where the credit entry should go, to credit the suspense account instead.

Suppose that it was eventually discovered that the cheque was for some old office furniture that had been sold then the bookkeeper would remove the credit in the suspense account with a debit entry and then correctly credit the disposal account (see earlier chapter) with the credit entry.

Identifying errors in double entry records

- Journal entries and supporting narrative
- An approach to dealing with exam questions

4 Identifying errors in double entry records

4.1 Journal entries and supporting narrative

Entries in the journal are accompanied by supporting narrative to explain the nature of the entry. In practice, the narrative should always provide a proper description of the transaction that is being recorded. However, in your examination, you might be given a question that presents four double entry transactions in a journal, with supporting narrative. The question might then ask you to identify which of the journal entries is (or are) correct for the narrative explanation provided.

This type of question provides a test of your understanding of double entry accounting, including double entries needed to correct errors.

4.2 An approach to dealing with exam questions

The only way of answering this type of examination question is to study the narrative explanation and work out what the double entry should be if the narrative is correct. You should then check the double entry you consider correct with the journal entry in the question.



Example

Which of the following journal entries are correct, according to their narratives?

	Dr	Cr
	\$	\$
(1) Rent expense account	9,000	
Suspense account		9,000
Correction of error in posting \$32,000 cash paid for rent to the rent expense account as \$23,000		
(2) Share premium account	400,000	
Share capital account		400,000
1 for 4 bonus issue on share capital of 1,600,000 50c shares		

(3)	Trade investment in Company V	960,000	
	Share capital account		400,000
	Share premium account		560,000
	800,000 50c shares issued at \$1.20 per share in exchange for shares in V		
(4)	Discounts allowed	5,300	
	Discounts received	5,300	
	Suspense account		10,600
	Correction of error in posting discounts received of \$5,300 as a debit in the discounts allowed account.		

a**Answer**

Each journal entry must be checked individually.

Entry 1

If the entry in the cash book is correct, this error results in total debits and total credits being different. Rent paid (a debit balance) has been under-recorded by \$9,000, and a suspense account with a debit balance of \$9,000 must be opened.

(1) What has been recorded

Rent account	
Dr	Cr
23,000	

Suspense account	
Dr	Cr
9,000	

(2) What should have been recorded

Rent account	
Dr	Cr
32,000	

Suspense account	
Dr	Cr
0	

This error would be corrected as follows.

Journal entry	Debit	Credit
	\$	\$
Rent	9,000	
Suspense account		9,000
Correction of error		

This is the entry given in the question, which is therefore correct.

Entry 2

A bonus issue of shares is recorded by means of a credit entry to share capital and a matching debit entry in the share premium account. However the journal entry does not match the narrative because the amount of the transaction (400,000 shares of 50c each) should be for \$200,000, not \$400,000.

Entry 3

This transaction, according to the narrative, is to acquire an investment (an asset) by issuing shares at a premium. The total value of the transaction is \$960,000 (800,000 shares at \$1.20 each); therefore the cost of the asset is \$960,000 and a debit entry is required in the asset account for the investment. The corresponding credit entries should be to the share capital account (800,000 shares of 50c each = \$400,000) and share premium (800,000 shares at 70c premium each = \$560,000).

The narrative and the journal entry therefore correspond correctly with each other.

Entry 4**(1) What has been recorded**

Discounts allowed account	
Dr	Cr
5,300	

Discounts received account	
Dr	Cr
	0

(2) What should have been recorded

Discounts allowed account	
Dr	Cr
0	

Discounts received account	
Dr	Cr
	5,300

As a result of this error, total debits are \$5,300 higher than they should be, and total credits are \$5,300 lower than they should be. This error is corrected as follows, with an entry in the suspense account to match total debits with total credits:

Journal entry	Debit	Credit
	\$	\$
Discounts allowed		5,300
Discounts received		5,300
Suspense account	10,600	
= Correction of error		

This is not the transaction recorded in the journal; therefore either the journal entry is wrong or the supporting narrative is incorrect.

Practice multiple choice questions

- 1** Which of the following errors would cause a trial balance not to balance?
- 1 Failure to record a transaction.
 - 2 Cost of a new machine debited to machinery repairs account. The cash entry was made correctly.
 - 3 An error in adding up the cash book total.
 - 4 Inventory taken by the owner of the business for personal use recorded by a debit to the purchases account and a credit to drawings account.
- A** All four items
B 1 and 3 only

- C** 2 and 4 only
D 3 only

(2 marks)

2 Which of the following journal entries are correct, according to their narratives?

	Dr	Cr
	\$	\$
A Discounts allowed	14,200	
Discounts received		14,200
Correction of error: discounts received incorrectly credited to discounts allowed account		
B Wages	17,000	
Purchases	8,000	
Site preparation costs account		25,000
Transferring cost of site preparation work using the company's own employees and materials from inventory		
C Rental income	34,000	
Rent expenses	34,000	
Suspense account		68,000
Correction of error: rent expenses debited in error to rental income account		
D Mr Lima personal account	150,000	
Wages and salaries expense		150,000
Payment of annual bonus to Mr Lima chief executive officer		

(2 marks)

3 A company's trial balance failed to agree, and a suspense account was opened for the difference.

Which of the following errors would require an entry in the suspense account in order to correct them?

- The debit side of the telephone expenses account had been undercast.
- The total of the discounts received account in the cash book had been debited to discounts allowed.
- A cash refund to a customer had been recorded by debiting the cash book and crediting the customer's account.
- A cash payment to acquire a new office computer had been correctly entered in the cash book but debited to IT repairs account.

- A** 1 and 2 only
- B** 1 and 4 only
- C** 2 and 3 only
- D** 1 and 3 only

(2 marks)

- 4** The debit side of a company's trial balance totals \$1,200 more than the credit side.

Which one of the following errors would account fully for the difference?

- A** Discount received of \$600 has been debited to the discounts allowed account.
- B** \$600 paid for office cleaning has been correctly entered in the cash book and credited to the office equipment account.
- C** The petty cash balance of \$1,200 has been omitted entirely from the trial balance.
- D** A receipt of \$1,200 for royalties has been omitted from the accounting records.

(2 marks)

- 5** A company's bookkeeper made the following errors.

Discounts allowed of \$3,520 were credited to the discounts received account.

Discounts received of \$4,510 were debited to the discounts allowed account.

What journal entry would correct these errors?

	Debit	Credit	
	\$	\$	
A Discounts allowed	8,030		
Discounts received		8,030	
B Discounts allowed	3,520		
Suspense account	990		
Discounts received		4,510	
C Suspense account	1,980		
Discounts allowed		990	
Discounts received		990	
D Discounts allowed	7,040		
Suspense account	1,980		
Discounts received		9,020	(2 marks)

Control accounts and bank reconciliations

Contents

- | | |
|---|---|
| 1 | Control accounts and control account reconciliations |
| 2 | Supplier statements: reconciliation with ledger account |
| 3 | Bank reconciliations |

Control accounts and control account reconciliations

- The meaning of a control account
- Control accounts and reconciliation as a method of identifying and correcting errors
- Other points to note about control accounts

1 Control accounts and control account reconciliations

1.1 The meaning of a control account

A control account is an account in which total values are recorded. It is a 'total' account. Control accounts are used in the main ledger.

- The receivables ledger control account is an account for recording the value of transactions in total with credit customers. The balance on the receivables ledger control account (debit balance) is the total amount currently owed by all customers.
- The payables ledger control account is an account for recording the value of credit transactions in total with suppliers. The balance on the payables ledger control account (credit balance) is the total amount currently owed to all trade suppliers.

When there is a control account for receivables in the main ledger, there must be individual accounts for each credit customer in a separate receivables ledger. Similarly when there is a control account for payables in the main ledger, there must be individual accounts for each supplier in a separate payables ledger.

For example, suppose that a company has 800 credit customers. It will probably have a receivables ledger control account in the main ledger for recording the total of transactions with its 800 customers. In addition there will be 800 individual accounts, maintained in the receivables ledger, for recording transactions with each credit customer. If the company did not have a control account in the main ledger, it would have to include the 800 individual customer accounts as accounts in the main ledger itself.

1.2 Control accounts and reconciliation as a method of identifying and correcting errors

Reconciliation means making sure that two figures or totals are consistent with each other and agree with each other. The control accounts in an accounting system can be used for control purposes, to make sure that transactions have been recorded correctly in the accounts. This is because if the transactions have been recorded correctly, the following situation should occur.

- The balance on the receivables control account in the main ledger should equal the total of the balances on all the individual customer accounts in the receivables ledger. A reconciliation check can be made to make sure that these

totals are the same. If they are different, the cause of the error (or errors) should be found and corrected.

- Similarly, the balance on the payables control account in the main ledger should equal the total of the balances on all the individual supplier accounts in the payables ledger. A reconciliation check can be made to make sure that these totals are the same. Any differences should be investigated, and the errors corrected.

A control account reconciliation involves a comparison between these totals, looking for the reasons for any differences between them, and correcting errors that are discovered in the checking process. An advantage of having control accounts in the main ledger for receivables and trade payables is therefore that they can be used to check for errors in the book-keeping system, and help to ensure that the balances for receivables and trade payables in the financial statements are correct.

Why might there be differences?

The balance on the receivables ledger control account might differ from the total of all the balances on the accounts in the receivables ledger for the following reasons:

- The total of the credit sales in the sales day book has been debited to the receivables ledger control account in the main ledger, but one or more individual transactions were not posted from the sales day book to the individual accounts in the receivables ledger.
- The total of cash received from customers, recorded in the cash book, has been posted correctly to the receivables ledger control account in the main ledger, but one or more individual transactions were not posted from the cash book to the individual accounts in the receivables ledger.
- In a manual accounting system, incorrect totals might be posted from the books of prime entry to the main ledger. For example, a sales day book might include the following error:

	\$
Entity A	200
Company B	250
Customer C	300
	<u>700</u>

The error here is that the total value of credit sales has been totalled incorrectly (as \$700 instead of \$750). The correct amounts will be posted to the individual accounts in the receivables ledger, but an incorrect total will be posted to both the sales account and the receivables ledger control account in the main ledger.

The errors described above do not result in differences in the total of debit and credit entries in the main ledger. Consequently, the existence of an error will not be discovered by preparing a trial balance.

However, these errors should be discovered by a control account reconciliation.

Making a control account reconciliation

To make a control account reconciliation, the starting point is to compare the control account balance with the total of all the balances in the individual customer or supplier accounts.

If the totals differ, the reasons for the difference need to be discovered. When the reasons are discovered, the errors must be corrected. A correction might involve:

- changing the control account balance, or
- changing one or more balances on individual customer or supplier accounts, or
- both of these changes.

After the corrections have been made, the two totals should be equal, and so should both be correct. If a difference still remains between the totals, this means that at least one error remains undetected.



Example

The balance on the receivables ledger control account in the main ledger of Entity Z is \$53,690. There are only five customer accounts in the receivables ledger, and the balances are as follows:

	\$
Customer A	12,000
Customer B	8,000
Customer C	6,000
Customer D	11,000
Customer E	15,000
	<u>52,000</u>

An investigation is carried out into the difference between the total account balances in the receivables ledger and the balance on the receivables control account.

- (1) A sale on credit of \$1,700 to Customer A has not been recorded in the customer's account in the receivables ledger, but is included in the control account balance.
- (2) Customer B has supplied goods to Entity Z to the value of \$400, and these have not yet been paid for by Entity Z. It has been agreed that this amount should be offset against the money owed to Entity Z by Customer B. No entries have yet been made for this 'contra' adjustment in the main ledger or the receivables and payables ledgers.
- (3) Sales returns of \$550 by Customer C have been recorded in C's individual account in the receivables ledger, but the transaction was not posted to the main ledger.
- (4) Discounts allowed of \$240 to Customer D have been recorded in D's individual account in the receivables ledger, but the transaction was not posted to the main ledger.
- (5) Sales returns of \$800 by Customer E have not been recorded in the customer's account in the receivables ledger, but are included in the control account balance.

Required

- Correct the balance on the receivables ledger control account.
- Correct the balances in the receivables ledger and reconcile the amended total of balances with the amended balance on the control account.

a**Answer**

The errors or omissions should be corrected in the ledger where the error or omission has occurred. When all the errors and omissions have been corrected, the control account balance and the total of the individual accounts in the receivables ledger should be equal.

Control account	\$
Original balance on the control account	53,690
Adjustments:	
Item 2: Reduce balance on Customer B account (note 1)	(400)
Item 3: Sales returns omitted: reduce balance	(550)
Item 4: Discounts allowed omitted: reduce balance	(240)
Adjusted control account balance	<u>52,500</u>

Note 1. In the main ledger, this 'contra' entry is recorded as:

- Debit: Payables ledger control account \$400
- Credit: Receivables ledger control account \$400

In the receivables and payables ledger, the adjustments are:

- Receivables ledger: Reduce balance on Customer B account \$400
- Payables ledger: Reduce balance on Supplier B account \$400

This reduces the balance on the Supplier B account in the payables ledger to zero, and reduces the balance in the account in the receivables ledger from \$8,000 to \$7,600.

Other corrections in the receivables ledger should be to:

- record the sale to customer A in the account for customer A (item (1))
- reduce the balance on the account of Customer E, by recording the sales returns (\$800, item (5)).

The adjusted total of the balances on the accounts in the receivables ledger now reconciles to the adjusted balance on the receivables control account.

Receivables ledger: account balances	Adjusted amount
	\$
Customer A: 12,000 + 1,700	13,700
Customer B: 8,000 - 400	7,600
Customer C	6,000
Customer D	11,000
Customer E: (15,000 – 800)	14,200
Adjusted total	<u>52,500</u>

1.3 Other points to note about control accounts

Credit balances for receivables and debit balances for payables

Occasionally you might find that the balance on a customer's account in the receivables ledger is a credit balance. This means that the customer is owed money. This might happen, for example, when a customer pays for goods but then returns some of them. The customer might be given a 'credit note' for the sales returns, and can deduct this from the amount payable for future transactions. A credit balance on a receivables account can also appear if the customer mistakenly pays too much.

For similar reasons, there might occasionally be debit balances on a supplier's account in the payables ledger.

To carry out a control account reconciliation, the net balances in the receivables or payables ledger should be the same as the net balance on the corresponding control account.

- To obtain the total of net balances on accounts in the receivables ledger, deduct the credit balances from the debit balances.
- Similarly to obtain the total of net balances on accounts in the payables ledger, deduct the debit balances from the credit balances.

Supplier statements: reconciliation with ledger account

- The meaning of a control account
- Control accounts and reconciliation as a method of identifying and correcting errors
- Other points to note about control accounts

2 Supplier statements: reconciliation with ledger account

2.1 Supplier statements

It is common business practice for suppliers to send monthly statements to their regular credit customers, listing the transactions that have occurred between the supplier and the customer during the month (such as sales, sales returns, payments and settlement discounts given). The statement ends with a balance showing the amount that, according to the supplier's accounting records, the customer currently owes.

2.2 Reconciliation of a statement with the supplier's ledger account

On receiving a statement from a supplier, a reconciliation check can be carried out. The purpose of this check is to compare the transactions and balance shown on the supplier's statement with the transactions and balance in the supplier's account in the payables ledger.

Any differences between the statement balance and the ledger account balance should be investigated and explained. Any problems, including errors, should be dealt with.

Reasons for differences

There are various reasons why the statement balance from a supplier might differ from the balance on the payables ledger account for the supplier.

- The supplier might have omitted a transaction from the statement, in which case the supplier's accounting records are incorrect.
- The customer might have omitted a transaction from its accounting records, in which case the customer's accounting records are incorrect.

Transactions that might have been omitted include sales/purchase transactions, payments, discounts, contra entries and returns/credit notes.

Carrying out a reconciliation

To carry out a reconciliation between the balance on a supplier's statement and the balance on the supplier's ledger account in the customer's payables ledger, the following steps should be taken.

- Compare the two totals. If they differ, the reasons for the difference should be discovered.
- The reasons for the difference can be identified fairly easily, by comparing the transactions listed in the supplier's statement with the transactions recorded in the ledger account for the supplier.
- If there is an omission or other error by the supplier, the supplier should be notified. For the purpose of making the reconciliation, the supplier's statement balance should be amended to allow for the error.
- If there has been an omission or error in the customer's accounting records, the error should be corrected and the balance on the supplier's account in the payables ledger will change.

If all the differences are identified, explained and where necessary corrected, the two balances should be equal – the amended balance on the supplier's statement and the amended balance on the supplier's account in the payables ledger.



Example

Etna received a statement of account from a supplier Ash, showing a balance to be paid of \$5,900. Etna's payables ledger account for Ash shows a balance due to Ash of \$3,360.

Investigation reveals the following:

- (1) Cash paid to Ash \$1,650 has not been allowed for by Ash.
- (2) Sales returned to Ash \$780 have not been allowed for by Ash.
- (3) Etna's ledger account for Ash has not been adjusted for \$110 of cash discount disallowed by Ash.

A reconciliation of the statement balance and the balance in the ledger account can be made, as follows.

<u>Statement</u>		<u>Ledger account</u>	
	\$		\$
Balance	5,900	Balance	3,360
Adjust for:		Adjust for	
Cash payment	(1,650)	Discount disallowed	110
Sales returns	(780)	Corrected balance	<u>3,470</u>
Adjusted balance	<u>3,470</u>		

Bank reconciliations

- The cash book (bank account in the ledger) and bank statements
- Differences and the need for a reconciliation
- Format of a bank reconciliation statement
- Other points to note about bank reconciliations

3 Bank reconciliations

3.1 The cash book (bank account in the ledger) and bank statements

The cash book in the main ledger (or 'bank account' in the main ledger) is used to record receipts and payments of cash through the bank account. The balance on this account is the amount that the business believes that it has in its bank account (debit balance) or the size of its bank overdraft (credit balance).

The bank will send regular statements to the business entity, listing all the transactions that the bank has recorded in the account for the entity since the previous statement, and the current balance on the account. This statement is a bank statement.

Bank reconciliations are a useful check on the accuracy of accounting records for cash. In principle, the balance in the bank account or cash book in the main ledger and the balance shown in the bank statement should be the same. A reconciliation can therefore be carried out, to check that the two amounts agree with each other.

3.2 Differences and the need for a reconciliation

However, the two figures will not always be the same, and the reconciliation needs to show that the differences can be properly accounted for. Differences between the balance in the cash book/bank account in the main ledger and the balance on the bank statement might be caused by any of the following:

- **Items are shown in the bank statement, but are not yet recorded in the cash book**

Some transactions might not be recorded in the cash book until they are notified to the business by the bank statement. Examples are:

- bank charges
- bank interest on an overdrawn balance
- a payment from a customer that has been rejected (for example, the customer's cheque has been dishonoured).

The cash book/bank balance in the main ledger should be amended to include these transactions.

When a cheque is dishonoured, (1) credit the bank account and (2) debit the receivables account in the main ledger and also (3) debit the customer's individual account in the receivables ledger.

Items are recorded in the cash book, but are not (yet) shown in the bank statement

Some transactions might have been recorded in the cash book/bank account in the main ledger, but have not yet been recorded by the bank.

- Cheques received from customers have been paid into the bank and recorded in the cash book. However, they have not yet been processed by the bank. Processing payments through the banking system might take two or three days, perhaps even longer. These are known as **outstanding lodgements**.
- Cheques paid to suppliers have not yet been presented to the bank for payment. The payment might be recorded in the ledger as soon as the cheque is sent to the supplier. The supplier might not bank the cheque immediately, however, so the money will not actually leave the bank account until several days after sending the cheque. These are known as **unpresented cheques**.

These are **timing differences**. The transactions will eventually be processed by the bank. There are no errors or omissions in the cash book, and no further action is needed.

■ Errors by the bank

The bank might sometimes make an error. If so, it should be notified and asked to correct its mistake. No further action is then needed.

■ Errors in the cash book

Possibly, an error has been made in the cash book. This should be identified by a detailed reconciliation of the bank statement with the cash book entries, and errors that are discovered should be corrected.

3.3 Format of a bank reconciliation statement

If there are no accounting errors by the bank or the business entity, the balance in the cash book/bank account in the main ledger and the balance in the bank statement should agree with each other. This should be demonstrated in a bank reconciliation statement.

The purpose of a bank reconciliation is to show that after making adjustments for any omissions or errors, the bank account balance in the main ledger agrees with the bank statement balance.

There are two ways of presenting a bank reconciliation statement:

- One approach is to begin the statement with the balance shown in the bank statement, and make the reconciliations to arrive at the bank balance in the main ledger.
- The other approach is to start with the bank account balance in the main ledger, and reconcile this to the bank statement balance.

Format 1: bank reconciliation		\$
Bank statement balance		X
Items in the cash book, not in the bank statement		
Outstanding lodgements		A
Unpresented cheques		(B)
Cash book balance before updating		<u>X + A - B</u>
Items in the bank statement, not in the cash book		
Bank charges	C	
Direct debit payments	D	
Dishonoured cheque	E	
		<u>F</u>
Updated/corrected cash book balance		<u>X + A - B - F</u>

Format 2: bank reconciliation		\$
Cash book balance before updating		Y
Items in the bank statement, not in the cash book		
Bank charges		(A)
Dishonoured cheque		(B)
Amended cash book balance		<u>Y - A - B</u>
Items in the cash book, not in the bank statement		
Outstanding lodgements (Payments from customers, now processed by the bank)		(C)
Unpresented cheques (Payments to suppliers and others, not yet processed by the bank)		D
Bank statement balance		<u>Y - A - B - C + D</u>

Note

It might be useful to remember that the bank statement presents information as recorded in the accounting system of the bank. To the bank, money in your bank account is money that it owes to you. It is therefore a credit balance. When your bank account is overdrawn, you owe money to the bank, and from the bank's point of view your account therefore has a debit balance.

**Example**

The cash book of a business shows a debit balance of \$4,500. A bank reconciliation shows that cheques for \$2,000 from customers that were recently paid into the bank have not yet been processed. Similarly, payments totalling \$6,200 made by the business to its suppliers and others have not yet been presented to the bank for payment. The bank has charged \$700 in bank charges. A cheque for \$300 from a customer, customer X, has been dishonoured. The balance in the account according to the bank statement is \$7,700.

A bank reconciliation statement could be prepared as follows:

	\$
Cash book balance	4,500
Items in the bank statement, not in the cash book	
Bank charges	(700)
Dishonoured cheque	(300)
Amended cash book balance	3,500
Items in the cash book, not in the bank statement	
Payments from customers, not processed by the bank	(2,000)
Payments not yet processed by the bank	6,200
Bank statement balance	7,700

The business should correct the cash book as follows:

- Credit Cash \$700, Debit Bank charges (expense account) \$700
- Credit Cash \$300, Debit Receivables control account \$300
- Debit the account of Customer X with \$300 in the receivables ledger.

Tutorial note: It is the corrected cash book figure that will appear in the trial balance and final accounts as the figure for bank and cash, in this case \$3,500.



Exercise 1

A company receives a bank statement showing a credit balance of \$7,400. On investigation, its accountant discovers that the bank statement does not show cheques received from customers for \$16,200 and banked, or cheque payments to suppliers for \$18,500. The bank statement also shows bank charges of \$250, which have not yet been recorded in the ledger.

Required

What is the current balance on the cash book? (This is the balance on the Bank account in the main ledger.)

3.4 Other points to note about bank reconciliations

Overdraft balances

For a company with a bank account, money in the bank is an asset and the cash balance in the cash book is a debit balance. If there is a bank overdraft, the cash book has a credit balance, indicating that money is owed to the bank.

For the bank, the situation is the opposite way round.

- Money held by the bank in a bank account for a customer is money that belongs to the customer. For the bank, deposits are therefore liabilities and an account is said to be in credit when there is money in it.
- If a bank allows an overdraft to a customer, the customer owes the bank. The amount of the overdraft is a form of receivable for the bank, and is an asset. To

the bank, an overdraft balance on a customer's account is therefore a debit balance (= asset).

A bank statement might therefore indicate that a customer's account has a 'debit balance', such as \$5,250 Dr. This debit balance means 'overdraft' and for the customer it is a liability and credit balance item.

Preparing a bank reconciliation with an overdraft balance

If you are given a question in which there is an overdraft balance in the bank statement, it is useful to make the negative balance clear by putting brackets around the balance.



Example

A company receives a bank statement showing an overdraft balance of \$17,500. The balance recorded in the company's cash book is a credit balance of \$12,100. A bank reconciliation revealed the following:

- (1) Lodgements not yet cleared by the bank (i.e. payments into the account but not recorded in the bank statement) \$24,300
- (2) Cheques not yet presented (i.e. payments from the account recorded in the cash book but not yet processed through the bank) \$18,900
- (3) Bank charges of \$700
- (4) A direct debit payment of \$600
- (5) A dishonoured cheque from a customer \$1,200.

Items (3), (4) and (5) have not yet been recorded in the cash book.

A bank reconciliation would be made as follows, with an overdraft balance indicated as a negative figure (in brackets).

Bank reconciliation	\$
Bank statement balance	(17,500)
Items in the cash book, not in the bank statement	
Outstanding lodgements	24,300
Unpresented cheques	(18,900)
Cash book balance before updating	(12,100)

The cash book should then be updated to include the items that have not yet been recorded.

	\$
Cash book balance before updating	(12,100)
Items in the bank statement, not in the cash book	
Bank charges	(700)
Direct debit	(600)
Dishonoured cheque	(1,200)
Amended cash book balance	(14,600)

Reporting cash in the statement of financial position

Ideally a bank reconciliation should be carried out by obtaining a bank statement as at the end of the financial year. The figure for cash that should then appear in the statement of financial position is the amended or updated balance in the cash book. In the example above this would be an overdraft balance (current liability) of \$14,600.



Exercise 2

A company receives a bank statement. The balance on its cash book (= bank account in the main ledger) is a debit balance of \$1,600. In reconciling the cash book balance with the bank statement balance, the accountant discovers that the bank statement does not show cheques received from customers for \$8,200 and banked, or cheque payments to suppliers for \$4,700. The bank statement also shows bank charges of \$150, a direct debit payment of \$400 and a dishonoured cheque for \$300. None of these three items has yet been recorded in the ledger.

Required

- (a) What is the balance on the bank statement?
- (b) What entries should be made in the company's ledger accounts when the cash book and the bank statement balances have been reconciled?

Practice multiple choice questions

- 1 The following bank reconciliation statement has been prepared by an inexperienced bookkeeper at 31 December 2010.

Bank reconciliation statement

	\$
Balance per bank statement (overdrawn)	2,850
Less: Outstanding cheques	7,920
	5,070
Add: Deposits credited after statement date	12,700
Cash at bank	17,770

What should be the correct balance in the cash book?

- A \$1,930 overdrawn
- B \$7,630 balance at bank
- C \$17,770 balance at bank, as stated
- D \$1,930 balance at bank

(2 marks)

2 Which of the following statements about bank reconciliations are correct?

- 1 An overdraft is a debit balance in a bank statement.
- 2 If a cheque from a customer is dishonoured, a debit entry to record the event should be entered in the cash book.
- 3 When preparing a bank reconciliation statement, unpresented cheques should be deducted from the balance of cash as shown in the bank statement.
- 4 An error by the bank should be recorded by means of an entry in the cash book.

A 1 and 3

B 2 and 3

C 1 and 4

D 2 and 4

(2 marks)

3 A payables ledger control account showed a credit balance of \$856,460. The payables ledger balances totalled \$871,260.

Which of the following possible errors could account in full for the difference?

A \$14,800 cash paid to a supplier was entered on the credit side of the supplier's account in the payables ledger.

B The total of discounts allowed \$31,300 was recorded as a debit entry in the payables ledger control account instead of the correct figure for discounts received of \$16,500.

C The total of discounts received \$7,400 has been entered on the credit side of the payables ledger control account.

D A contra against a receivables ledger debit balance of \$7,400 has been entered on the credit side of the payables ledger control account.

(2 marks)

4 In preparing a bank reconciliation statement, a bookkeeper identified the following differences between the bank statement balance and the cash book balance.

- 1 Customer cheque for \$525 dishonoured
- 2 Lodgements not credited \$52,890
- 3 Bank charges \$290
- 4 Interest on bank overdraft \$583
- 5 Outstanding cheques \$68,942
- 6 Direct debit \$350

Which of these items will require an entry in the cash book?

A 1, 3, 4 and 6

B 2, 3 and 5

C 1, 2, 5 and 6

D 3 and 4

(2 marks)

- 5** Dee received a statement from one of its suppliers, Zed, showing a balance due of \$9,440. The amount due according to the payables ledger account of Zed in Dee's records was \$4,770.

Comparison of the statement and the ledger account revealed the following.

- 1 A cheque sent by Dee for \$3,700 has not been allowed for by Zed
- 2 The ledger account of Dee has not been adjusted for a cash discount of \$80 disallowed by Zed because the payment was too late to earn the discount.

What difference remains between the two companies' records after adjusting for these items?

- A** \$1,050
- B** \$10,430
- C** \$10,590
- D** \$890

(2 marks)

- 6** The total of the list of balances in the payables ledger of Bounce on 30 June 2010 was \$289,500. This balance did not agree with the payables ledger control account balance. The following errors were discovered.

- 1 The total of purchases returns was undercast by \$3,000.
- 2 A contra entry of \$690 was recorded in the payables ledger control account but not in the payables ledger.
- 3 An invoice for \$8,720 was recorded in the supplier's account as \$7,820.

What amount should Bounce record in its statement of financial position as the amount of trade payables as at 30 June 2010?

- A** \$291,090
- B** \$289,710
- C** \$286,710
- D** \$291,510

(2 marks)

Preparing financial statements

Contents

- | | |
|---|--|
| 1 | Preparing a sole trader's financial statements |
| 2 | Preparing a company's financial statements |
| 3 | Taxation and dividends |
| 4 | Events after the reporting period |

Preparing a sole trader's financial statements

- From trial balance to income statement
- From trial balance and income statement to statement of financial position
- Current and non-current items
- Working capital
- Cut-off

1 Preparing a sole trader's financial statements

This chapter draws together some of the accounting principles and practices that have been described in previous chapters, and also considers some additional factors that are relevant to the preparation of a set of financial statements.

1.1 From trial balance to income statement

At the end of an accounting period, a trial balance is extracted from the main ledger. End-of-year adjustments are made to the balances to include depreciation and amortisation charges for non-current assets, accruals and prepayments, opening and closing inventories, bad debts and the allowance for irrecoverable debts.

After making all these end-of-year adjustments, the amounts in the 'extended' trial balance for income and expenses can be used to prepare an income statement for the accounting period, and calculate the profit or loss for the period. In the financial statements of a sole trader, there is no tax charge on profits.

1.2 From trial balance and income statement to statement of financial position

After making all the end-of-year adjustments and calculating the profit or loss for the period, a statement of financial position can be prepared. A statement of financial position is based on the accounting equation:

Assets = Capital + Liabilities.

Asset balances and liability balances can be obtained from the 'extended' trial balance. The capital at the end of the year for a sole trader is calculated as:

	\$
Capital at the beginning of the year	A
Any new capital introduced during the year	B
Add profit (or subtract loss) for the year	C
Deduct: Drawings during the year	(D)
Capital at the beginning of the year	A + B + C - D



Example

The following trial balance has been extracted from the accounts of Brenda, a sole trader.

Brenda

Trial balance as at 30 June Year 6

	DR	CR
	\$	\$
Sales		428,000
Sales returns	2,000	
Purchases	302,000	
Purchase returns		1,000
Carriage inwards	500	
Carriage outwards	900	
Wages and salaries	64,000	
Rent	14,000	
Heating and lighting	5,000	
Inventory as at 1 July Year 5	15,000	
Drawings	22,000	
Provision for doubtful debts		4,000
Equipment – at cost	102,000	
Motor vehicles – at cost	44,000	
Accumulated depreciation:		
– equipment		22,500
– motor vehicles		9,000
Trade receivables	51,000	
Trade payables		42,000
Bank		3,300
Sundry expenses	8,500	
Cash	500	
Capital as at 1 July Year 5		121,600
	<u>631,400</u>	<u>631,400</u>

The following additional information as at 30 June Year 6 is also available.

- \$400 is owed for heating and lighting expenses.
- \$700 has been prepaid for rent.
- It is decided that a bad debt of \$1,200 should be written off, and that the allowance for doubtful debts should be increased to \$4,500.
- Depreciation is to be provided for the year as follows:
 - Equipment – 10% on cost
 - Motor vehicles – 20% on cost.
- Inventory at 30 June Year 6 was valued at \$16,500.

Required

Prepare Brenda's income statement for the year ended 30 June Year 6 and her statement of financial position as at that date.

a**Answer**

Work through the following financial statements carefully. Workings are shown where appropriate. Make sure that you understand how all the figures have been obtained.

Brenda**Income statement for the year ended 30 June Year 6**

	\$	\$
Sales		428,000
Less Sales returns		(2,000)
		<u>426,000</u>
Opening inventory at 1 July Year 5	15,000	
Purchases	302,000	
	<u>317,000</u>	
Less: Purchase returns	(1,000)	
	<u>316,000</u>	
Carriage inwards	500	
	<u>316,500</u>	
Less: Closing inventory at 30 June Year 6	(16,500)	
Cost of sales		<u>(300,000)</u>
Gross profit		126,000
Wages and salaries	64,000	
Rent (14,000 – prepayment 700)	13,300	
Heating and lighting (5,000 + accrual 400)	5,400	
Depreciation, equipment: (10% × \$102,000)	10,200	
Depreciation, motor vehicles: (20% × \$44,000)	8,800	
Carriage outwards	900	
Bad and doubtful debts (1,200 + (4,500 – 4,000))	1,700	
Sundry expenses	8,500	
		<u>(112,800)</u>
Net profit (transfer to balance sheet/capital)		<u>13,200</u>

Statement of financial position: workings

Accumulated depreciation = opening figure in the trial balance + depreciation charge for the year

(1) Equipment: \$(22,500 + 10,200) = \$32,700

(2) Motor vehicles: \$(9,000 + 8,800) = \$17,800.

Brenda**Statement of financial position as at 30 June Year 6**

Non-current assets	Cost	Accumulated depreciation	Net book value
	\$	\$	\$
Equipment	102,000	32,700	69,300
Motor vehicles	44,000	17,800	26,200
	<u>146,000</u>	<u>50,500</u>	<u>95,500</u>
Current assets:			
Inventory		16,500	
Trade receivables (51,000 – 1,200 bad debt)	49,800		
Less: Allowance for doubtful debts	<u>(4,500)</u>		
		45,300	
Prepayment (rent)		700	
Cash		<u>500</u>	
			<u>63,000</u>
Total assets			<u>158,500</u>
Capital			
At 1 July Year 5			121,600
Net profit for the year			<u>13,200</u>
			134,800
Drawings			<u>(22,000)</u>
At 30 June Year 6			<u>112,800</u>
Current liabilities			
Bank overdraft (credit balance in bank)		3,300	
Trade payables		42,000	
Accrued heating and lighting expenses		<u>400</u>	
			<u>45,700</u>
Total capital and liabilities			<u>158,500</u>

1.3 Current and non-current items

In a statement of financial position, non-current assets are shown separately from current assets, and non-current liabilities are shown separately from current liabilities.

As a general rule, assets are current if they will be consumed or converted into cash within the next 12 months. Cash and cash equivalents are also current assets. (Cash equivalents are assets that can be converted into cash very quickly, such as money on deposit in a bank deposit account).

There are some exceptions to this general rule. For example inventory might be included in current assets if it is used in the normal course of business operations, and the average inventory turnover time exceeds 12 months. This means that work in progress or finished goods that might be held in excess of 12 months could be included in current assets.

Liabilities are current if they are payable within the next 12 months. It is therefore necessary to check the repayment dates on any bank loans or loan notes. Loans repayable within 12 months become current liabilities. For example if a company obtains a five-year bank loan, where none of the loan principal is repayable until the end of the loan period, the loan will be a non-current liability for the first four years and will then become a current liability when it is repayable within 12 months.

Prepayments and accrued income are current assets, although they might be included within the total for 'receivables' in the statement of financial position. Similarly accrued expenses (and deferred income) are current liabilities, although they are often included within the total for trade payables in the statement of financial position.

1.4 Working capital

The term 'working capital' means the amount of long-term capital that a business entity uses to finance its day-to-day business operations. There are several methods of calculating working capital, but for the purpose of financial reporting the normal definition is:

$$\text{Working capital} = \text{Current assets} - \text{Current liabilities}.$$

An understanding of working capital and how business transactions affect the total of working capital might be the subject of an examination question. In dealing with these questions, it is important to remember:

- the accounting equation (and the effect of each transaction on assets, liabilities and capital/profit), and
- the distinction between non-current and current items.



Example 1

A sole trader buys a machine costing \$12,000. What effect does this have on working capital?



Answer

There is either a fall in current assets (cash) or an increase in current liabilities (payables) and an increase in a non-current asset. Working capital will therefore fall by \$12,000.

e**Example 2**

A sole trader receives payment of \$4,000 from a credit customer. What effect does this have on working capital?

a**Answer**

There is an increase in cash and a reduction in receivables. The net result is no change in working capital.

e**Example 3**

A sole trader sells inventory costing \$2,000 for \$2,800. What effect does this have on working capital?

a**Answer**

There is an increase in cash or receivables (\$2,800) and a reduction of \$2,000 in inventory. There is also an increase in capital (profit) of \$800. The net effect is an increase of \$800 in current assets and working capital.

e**Example 4**

A sole trader returns inventory costing \$1,200 to a supplier and receives a credit note. What effect does this have on working capital?

a**Answer**

There is a reduction in inventory by \$1,200 and a reduction in trade payables by \$1,200. Both current assets and current liabilities are reduced by the same amount, so there is no change in working capital.

e**Example 5**

A sole trader wrote off a debt of \$1,500 as irrecoverable? Subsequently the customer paid the money in full. What effect does this payment have on working capital?

a**Answer**

There is an increase of \$1,500 in cash. When the debt was written off as irrecoverable, there was a charge against profit and the receivable was removed from current assets. When payment is subsequently received, this is treated as an addition to profit (and capital), reversing the previous loss. The effect of the payment is therefore to increase current assets and working capital by \$1,500.

1.5 Cut-off

It is important to understand that a statement of financial position represents the position of the business as at the end of the financial reporting period. In practice, a business entity will decide on a 'cut-off': transactions before the cut off occur in the reporting period just ending and transactions after the cut-off occur in the next reporting period.

In order to establish a value for closing inventory, a business entity might carry out an inventory count at the end of the financial year. For practical reasons, the inventory count might not happen until a few days after the end of the financial year. If there have been purchases, sales or purchase returns between the end of the reporting period and the date of the inventory count, the value of inventory obtained from the inventory count should be adjusted in order to arrive at a value for inventory as at the end of the reporting period.

	\$
Value of inventory from the inventory count	A
Adjustments for transactions between the end of the reporting period and the inventory count	
Deduct: Purchases during that time	(B)
Add back: The cost of goods sold during that time	C
Add back: Purchase returns during that time	D
Inventory as at the year end for inclusion in financial statements	<u>A - B + C + D</u>



Example

The financial year of a business entity ends on 31 December. The entity carries out an inventory count on 5 January Year 2 and obtains a value for inventory as at that date of \$510,000.

The following transactions occurred between 31 December Year 1 and 5 January Year 2.

	\$
Purchase returns to a supplier	1,100
Sales of inventory (profit = 30% of sales)	20,000
New purchases	7,300

What value for inventory should be included in the statement of financial position as at 31 December Year 1?

a**Answer**

	\$
Value of inventory from the inventory count	510,000
Adjustments for transactions between the end of the reporting period and the inventory count	
Deduct: Purchases during that time	(7,300)
Add back: The cost of goods sold during that time ($70\% \times \$20,000$)	14,000
Add back: Purchase returns during that time	1,100
Value of inventory at the end of the year	<u>517,800</u>

Preparing a company's financial statements

- Comparing the financial statements of a sole trader and a company
- Format of a statement of financial position for a company
- Statement of comprehensive income
- Analysis of expenses
- IAS 8: Accounting policies, changes in accounting estimates and errors

2 Preparing a company's financial statements

2.1 Comparing the financial statements of a sole trader and a company

The same basic accounting concepts are applied to preparing the financial statements of companies as to the financial statements of sole traders. However, there are some major differences.

- For companies, equity capital is represented by share capital and reserves, not simply by 'capital'.
- For companies, tax on profit is an item in profit and loss. Tax is excluded from a sole trader's financial statements.
- Sole traders have no reason to comply fully with the requirements of international accounting standards. The financial statements of a sole trader are therefore usually limited to an income statement and a statement of financial position.
- Many companies do comply with the requirements of international accounting standards. As a consequence, they prepare more financial statements and disclose much more information to users of the statements.

IAS 1 *Presentation of financial statements* sets out rules for how financial statements should be presented and specifies basic requirements about what they should consist of and what they should contain. To comply with IAS 1 an entity must produce:

- A statement of comprehensive income or an income statement followed by a statement of comprehensive income
- A statement of financial position
- A statement of changes in equity
- A statement of cash flows
- Notes to the financial statements including the disclosure required by various international accounting standards.

2.2 Format of a statement of financial position for a company

IAS 1 provides a list of items that, **as a minimum**, must be shown on the face of the statement of financial position and on a line of its own in the statement.

A distinction is usually required:

- between non-current and current assets, and
- between non-current and current liabilities.

For a **single company**, the required 'line items' in the balance sheet include:

Non-current assets

- (a) property, plant and equipment
- (b) intangible assets
- (c) long-term financial assets, such as long-term holdings of shares in other companies

Current assets

- (d) inventories
- (e) trade and other receivables
- (f) cash and cash equivalents

Liabilities (non-current or current)

- (g) trade payables and other payables
- (h) liability for tax on profits
- (i) financial liabilities (for example, bank loans)

Equity

- (j) issued capital and reserves (in other words, the component elements of equity in the company).

Additional line items

Some of the above line items in the statement of financial position are sub-analysed into different categories, which should be shown either:

- as additional lines in the statement of financial position adding up to the total amount for the item as a whole, or
- in notes to the financial statements.

Examples of items that are sub-classified in the statement of financial position or in a note to the financial statements include:

- the different categories of tangible non-current assets, such as property, plant and machinery, motor vehicles, and so on
- inventories are sub-classified into merchandise (goods for re-sale), materials, work-in-progress and finished goods.

Although IAS 1 does not specify what the format of the statement of financial position should be, it presents an illustrative statement in an Appendix to the Standard.

An illustrative example is shown below, for a single trading company. Note the similarities as well as the differences between a statement of financial position for a sole trader and for a company.

**Statement of financial position of Wolf Company as at 31 December
Year 1**

	\$m	\$m
Assets		
Non-current assets		
Property, plant and equipment	76.2	
Intangible assets	5.0	
Investments	3.0	
		84.2
Current assets		
Inventories	16.4	
Trade and other receivables	19.0	
Cash	1.2	
		36.6
Total assets		120.8
Equity and liabilities		
Capital and reserves		
Issued capital	10.0	
Share premium	4.0	
Revaluation reserve	11.0	
Retained earnings	42.8	
		67.8
Non-current liabilities		
Long-term loans	20.0	
Long-term provisions	10.0	
		30.0
Current liabilities		
Trade and other payables	12.0	
Short-term borrowings (bank overdraft)	1.5	
Current tax payable	3.5	
Short-term provisions	6.0	
		23.0
Total equity and liabilities		120.8

Points to note

- In the statement of financial position itself, or in a note to the financial statements, the following disclosures should be made about share capital:
 - the number of shares authorised
 - the number of shares issued
 - the par value (nominal value) of each share.

- The shares included under the heading 'equity' must be classes of shares that are recognised as equity. This is a fairly complex area of accounting, because preference shares must often be treated as long-term debt and not as equity shares.
- IAS 1 states that a description should be given of the nature and purpose of reserves. This means that different types of reserves should be shown, with a description that gives an indication of its purpose: for example, there might be a share premium account, a revaluation reserve account, and so on.
- Proposed dividends are not included in the statement of financial position as a current liability, except in the very unusual circumstance where the final dividend has been proposed before the end of the financial year. Any proposed final dividend should normally be disclosed in a note to the financial statements as a non-adjusting event after the reporting period.

Reserves

The number of different reserves that a company might include in its statement of financial position is not specified by IAS 1. Particular reserves might be a requirement for companies under the terms of national company law. However:

- A share premium reserve must be used to record premiums on new share issues, although the reserve can be reduced if the company makes a bonus issue.
- A revaluation reserve is necessary whenever a company uses the revaluation model for any category of its non-current assets.
- A retained earnings reserve must be included, because this is a reserve for realised profits still retained within the business.

Other reserves do not represent realised profits. The share premium reserve represents capital invested in the company. The revaluation reserve represents unrealised profits on assets still held by the company. Retained earnings represent realised profits reported through profit and loss (the income statement) or by transfer from the revaluation reserve when a re-valued asset is disposed of. Realised profits can be distributed to shareholders in the form of dividends.

Each reserve is a component of equity and movements in reserves are reported in the statement of changes in equity, which is described in an earlier chapter.

2.3 Statement of comprehensive income

IAS 1 requires an entity to present all items of income and expense during a period in either:

- a single statement of comprehensive income, or
- in two statements, an income statement followed by a statement of comprehensive income: these two separate statements should include all the information that would otherwise be included in the single statement of comprehensive income.

For the purpose of explanation, it might be useful to think of the presentation of the information in two separate statements:

- An income statement shows the components of profit or loss. It begins with 'Revenue' and ends with 'Profit (or Loss)' for the period after tax. When an item is 'reported in profit and loss' we mean that it is included in the calculation of profit or loss within this part of the statement of comprehensive income.
- If the income statement is shown separately, the statement of comprehensive income shows 'other comprehensive income' during the period, including any related tax.

(A single statement of comprehensive income simply combines these two statements into one.

If an examination question refers to a statement of comprehensive income, it will be referring to a single statement, combining the income statement elements and the other comprehensive income.

If an examination question refers to an income statement, this will mean the statement from 'revenue' to 'profit or loss for the year'.

Examples of other comprehensive income

There are several examples of 'other comprehensive income' but the most significant for the purpose of your examination is unrealised gains or losses on the revaluation of non-current assets (which add to other comprehensive income).

Definition of total comprehensive income

Total comprehensive income during a period is the sum of:

- the profit or loss for the period and
- other comprehensive income.

Information to be presented on the face of the statement of comprehensive income

As a **minimum**, IAS 1 requires that the statement of comprehensive income should include line items showing the following amounts for the financial period:

- (a) revenue
- (b) finance costs (for example, interest costs)
- (c) tax expense (i.e. tax on profits for the year)
- (d) profit or loss
- (e) each component of 'other comprehensive income'
- (f) total comprehensive income.

When an entity presents an income statement separately from the statement of comprehensive income, the **income statement** must include the items listed above as (a) to (d).

Additional line items should be presented on the face of the income statement or the statement of comprehensive income when it is relevant to an understanding of the entity's financial performance.

Recognition in profit or loss

With the introduction of a requirement to present a statement of comprehensive income, it is necessary to distinguish between:

- items that should be included in the section of the statement between 'revenue' and 'profit', and
- other comprehensive income.

A useful way of making this distinction is that if an item is included in the statement of comprehensive income, between 'revenue' and 'profit', the item is '**recognised within profit or loss**'. This term is now used in accounting standards.

Information to be shown on the face of the statement of comprehensive income (or the income statement, if separate) or in the notes

The following information may be shown either on the face of the statement of comprehensive income or in a note to the financial statements:

- **material items** of income and expense
- an **analysis of expenses**, providing either:
 - expenses analysed by their nature, or
 - expenses analysed by the function that has incurred them.

IAS 1 encourages entities to show this analysis of expenses on the face of the statement of comprehensive income (or income statement), rather than in a note to the accounts.

Material items that might be disclosed separately include:

- a write-down of inventories from cost to net realisable value, or a write-down of items of property, plant and equipment to recoverable amount
- the cost of a restructuring of activities
- disposals of items of property, plant and equipment
- litigation settlements
- a reversal of a provision.

2.4 Analysis of expenses

Expenses in the 'income statement' part of the statement of comprehensive income should be analysed. Either of two methods of analysis may be used:

- according to the **nature** of expenses
- according to the **function** of the expense.

Entities should choose the method that provides the more relevant or reliable information.

Analysis of expenses by their nature

When expenses are analysed according to their nature, the categories of expenses will vary according to the nature of the business.

In a manufacturing business, expenses would probably be classified as:

- raw materials and consumables used
- staff costs ('employee benefits costs')
- depreciation
- other expenses.

There will also be an adjustment for the increase or decrease in inventories of finished goods and work-in-progress during the period.

An example of an income statement, showing expenses by their nature, is shown below, with illustrative figures included.

	\$m	\$m
Revenue		7,200
Other income		300
		<u>7,500</u>
Changes in inventories of finished goods and work-in-progress (reduction = expense, increase = negative expense)	90	
Raw materials and consumables used	1,200	
Staff costs (employee benefits expense)	2,000	
Depreciation and amortisation expense	1,000	
Other expenses	2,300	
Finance costs (interest cost)	<u>60</u>	
		<u>6,650</u>
Profit before tax		850
Income tax expense		<u>250</u>
Profit for the period		<u>600</u>

Analysis of expenses by their function

When expenses are analysed according to their function, the functions are commonly 'cost of sales', 'distribution costs', 'administrative expenses' and 'other expenses'. This method of analysis is also called the 'cost of sales method'. In practice, most entities use this method.

An example of an income statement, showing expenses by function (cost of sales, distribution costs, administrative expenses) is as follows.

ABCD Entity**Income statement for the year ended 31 December 20XX**

	\$m
Revenue	7,200
Cost of sales	(2,700)
Gross profit	4,500
Other income	300
Distribution costs	(2,100)
Administrative expenses	(1,400)
Other expenses	(390)
Finance costs	(60)
Profit before tax	850
Income tax expense	(250)
Profit for the period	600

This method of presentation has some disadvantages:

- The classification of expenses as cost of sales, distribution costs or administrative expenses is often based on the judgement of management. This is because management decide how to allocate costs to each function, and how to share joint costs between two or more functions.
- This method of analysis does not show the amount of some important expenses.

IAS 1 therefore requires that if the analysis by function method is used, additional information about expenses must be included in the notes to the accounts, showing:

- depreciation and amortisation expense, and
- employee benefits expense (staff costs).

Additional comments on the income statement format

- 'Other income' consists of income from sources other than sales revenue. An example of other income is dividend income (income from investments in shares of other companies).
- In the past, companies used to disclose some items of gain or loss as 'extraordinary items'. It is now not permitted to have any 'extraordinary items' in the income statement.
- However, **material** items of income or expense should be disclosed in the financial statements, either in the income statement itself or in a note to the financial statements.

2.5 IAS 8: Accounting policies, changes in accounting estimates and errors

IAS 1 and other international accounting standards together require extensive disclosures in the financial statements. Many of these disclosures are contained in notes to the financial statements, but IAS 1 also specifies items that must be shown on the face of the statement of financial position, statement of comprehensive income or statement of changes in equity.

Many of the disclosures you need to be aware of for your examination have already been mentioned. However you should also be aware of the need to disclose details of:

- the accounting policies used to prepare the financial statements
- any change in accounting policy.

Changes in accounting policy

IAS 8 states that a change in accounting policy should happen only rarely, and is only permissible if either:

- a new accounting standard requires a change in accounting policy, or
- a change in policy will result in the financial statements providing more relevant and reliable information for users.

When a change is made in accounting policy, the change should be applied retrospectively, which means that the figures for all previous financial years, to the extent practicable, must be changed to comply with the new policy.

When an accounting policy is changed voluntarily, a note to the financial statements must explain:

- the nature of the change in policy and the reasons for the change
- the effect of the change on the reported figures in the financial statements, in the current year and the previous year (comparative figures). (The effect of the change in policy should also be itemised in the statement of changes in equity.)

Changes in accounting estimates

Accounting estimates are items in the financial statements that rely on management judgement. Examples are the expected useful life of a non-current asset, the expected residual value of a non-current asset and the amount of a provision or allowance.

Accounting estimates might be changed. For example the expected useful life of a non-current asset might be revised. When an accounting estimate is changed, the change is applied to the current accounting period in which the change is made and to future periods where appropriate. The change is not applied retrospectively to previous financial years.

Prior period errors

A prior period error is an error that occurred in one accounting period but that is not discovered until a subsequent accounting period. Prior period errors must be corrected by making retrospective changes to amounts in financial statements for previous years (including figures for retained earnings brought forward). The effect of the error on the brought forward equity capital and reserves must be disclosed separately in the statement of changes in equity

Taxation and dividends

- Taxation on profits
- Taxation in the income statement
- Taxation in the balance sheet
- Accounting for dividends

3 Taxation and dividends

3.1 Taxation on profits

A company is a legal person, and is liable to pay tax on the profits that it makes. This tax is called income tax in international accounting standards.

The income statement and statement of financial position of a sole trader or partnership is prepared without any concern for taxation on profits. The taxation of the income of sole traders and partners is not a concern of their businesses, and is not recorded in the financial accounts of the business.

Companies are different, because the company has a liability for taxation that is reported in its income statement and statement of financial position.

- The income statement reports the amount of taxation on the profit of the company for the year. This is deducted in reaching a figure for profit after taxation.
- The statement of financial position reports the amount of taxation that the company owes to the tax authorities as at the end of the reporting period.

3.2 Taxation in the income statement

The basic rule for taxation in the income statement of a company is that it is a charge against profits after interest. The profit after tax is added to the retained earnings reserve.

For example:

	\$
Profits from operations	460,000
Interest	60,000
Profit before tax	400,000
Tax	100,000
Profit after tax	300,000

Over-estimate or under-estimate of tax from the previous year

When the financial statements are prepared, the tax charge on the profits for the year is likely to be an estimate. The figure for tax on profits in the statement of comprehensive income/income statement is therefore not the amount of tax that

will eventually be payable, because it is only an estimate. The actual tax charge, agreed with the tax authorities some time later, is likely to be different.

In these circumstances, the tax charge for the year is adjusted for any under-estimate or over-estimate of tax in the previous year.

- An under-estimate of tax on the previous year's profits is added to the tax charge for the current year.
- An over-estimate of tax on the previous year's profits is deducted from the tax charge for the current year.

For example:

	\$	\$
Profit from operations		460,000
Interest		60,000
Profit before tax		400,000
Tax:		
Adjustment for under-estimate of tax in the previous year	3,000	
Tax on current year profits	100,000	
Tax charge for the year		103,000
Profit after tax		297,000

3.3 Taxation in the statement of financial position

The taxation charge for the year is the liability that the company expects to pay. The timing of tax payments on profits varies from one country to another, depending on the tax rules in each country. The actual amount of tax payable, and reported in the statement of financial position as a current liability (taxation payable), is calculated as follows:

	\$
Tax payable at the beginning of the year	A
Tax charge for the year	B
	A + B
Tax payments made during the year	(C)
Tax payable at the end of the year	A + B – C



Example

Fresh Company has a financial year ending on 31 December. At 31 December Year 5 it had a liability for income tax (= tax on its profits) of \$77,000. The tax on profits for the year to 31 December Year 6 was \$114,000.

The tax charge for the year to 31 December Year 5 was over-estimated by \$6,000. During the year to 31 December Year 6, the company made payments of \$123,000 in income tax.

Required

Calculate:

- the tax charge for the year to 31 December Year 6, to include in the income statement
- the liability for income tax as at 31 December Year 6, to include in the balance sheet.

a**Answer**

(a)

Tax:	\$
Adjustment for over-estimate of tax in the previous year	(6,000)
Tax on current year profits	114,000
Taxation charge for the year	<u>108,000</u>

(b)

	\$
Tax payable at the beginning of the year	77,000
Tax charge for the year	<u>108,000</u>
	185,000
Tax payments made during the year	<u>(123,000)</u>
Tax payable at the end of the year	<u>62,000</u>

The tax payable will appear as a current liability in the statement of financial position.

e
1**Exercise 1**

A company has a year end of 31 December. At 31 December Year 2 there was a tax liability in the balance sheet of \$54,000. When the tax liability for Year 2 was finalised and paid it was found to be \$59,000.

The estimate of tax due for the year to 31 December Year 3 is \$65,000.

What is the tax charge for Year 3 in the income statement and the liability for tax in the statement of financial position at 31 December Year 3?

3.4 Accounting for dividends

The accounting rules for dividends can be summarised as follows.

- **Total dividends paid are not shown in the income statement**, as part of the income statement itself.
- The **proposed final dividend** for the accounting year is not shown in the statement of financial position, **unless** (in a very unusual circumstance) the final dividend is proposed before the end of the financial year.

- Total dividends actually paid during the year (the final dividend for the previous year and the interim dividend in the current year) are reported as deductions from equity (deductions from retained earnings) in another financial statement, the **statement of changes in equity**.
- The final proposed dividend for the year, if it is proposed after the end of the year (which is the normal practice), is disclosed in a note to the financial statements, as a non-adjusting post-balance sheet event.
- The figure for retained earnings in the statement of financial position is after deduction of equity dividends paid during the period.

Dividends are paid out of retained earnings. When a dividend is paid:

- Debit: Retained earnings
- Credit: Bank account.



Example

A company has 2,000,000 ordinary shares of \$0.50 each in issue. At the beginning of Year 2, its accumulated profits were \$450,000. Also at the beginning of Year 2, it owed \$50,000 in tax on profits to the tax authorities

Its profit before taxation for Year 2 was \$300,000. Taxation on these profits is \$90,000. During the year, the company:

- made payments of tax on profits totalling \$85,000
- paid a final dividend for the previous financial year (Year 1) of 7 cents per share
- paid an interim dividend for the current financial year (Year 2) of 3 cents per share

Profit for the year

	\$
Profit before taxation	300,000
Taxation	90,000
Profit after taxation (credit retained earnings reserve)	<u>210,000</u>

Retained earnings

	\$	\$
Balance at the beginning of the year		450,000
Profit after taxation for Year 1		<u>210,000</u>
		660,000
Dividends		
Final dividend for Year 1 (2,000,000 × \$0.07)	140,000	
Interim dividend for Year 2 (2,000,000 × \$0.03)	<u>60,000</u>	
		<u>200,000</u>
Balance at the end of the year (statement of financial position)		<u>460,000</u>

Taxation: current liability

	\$
Liability for taxation at the beginning of the year	50,000
Taxation on profits for the year	90,000
	<u>140,000</u>
Taxation paid during the year	<u>(85,000)</u>
Liability for taxation at the year-end (balance sheet)	<u>55,000</u>

Events after the reporting period

- Definition
- The accounting problem with events after the balance sheet date
- Adjusting and non-adjusting events
- Events after the reporting period: the accounting rules (IAS 10)
- Proposed dividends

4 Events after the reporting period

4.1 Definition

An event after the reporting period is an item of information that is obtained or an event that occurs:

- after the end of a financial period (after the reporting period) and
- before the financial statements are authorised for issue, and
- this item of information or event is **material and relevant** to the financial position of the business.

An event can be either favourable for the business or adverse (unfavourable).

4.2 The accounting problem with events after the reporting period

When an event occurs after the reporting period, the problem is to decide:

- whether to alter the financial statements for the period that has just ended, to include the effect of the event, and
- if the financial statements are not altered, whether to report the event in some way in the financial statements that will soon be issued.

The rules for the accounting treatment of events after the reporting period are contained in IAS 10 **Events after the reporting period**.

4.3 Adjusting and non-adjusting events

A distinction is made between adjusting events after the reporting period and non-adjusting events.

- An **adjusting event** is an event or information that provides evidence about conditions that already existed at the end of the reporting period.
- A **non-adjusting event** is an event that occurs after the reporting period and does not relate to conditions that existed at the end of the reporting period. However, the event is of sufficient importance (it is sufficiently material) that a failure to disclose its existence to the users of the financial statements would be misleading and inappropriate.

4.4 Events after the reporting period: the accounting rules (IAS 10)

The accounting rules for events after the reporting period are as follows:

Adjusting events	Non-adjusting events
Alter the financial statements for the accounting period that has just ended, to include the effects of the event.	Do not alter the financial statements for the accounting period that has just ended, to include the effects of the event. However, provide details of the event in a note to the financial statements.
<i>Examples</i>	<i>Examples</i>
The bankruptcy of a customer who owed money at the end of the reporting period. A bad debt is now expected. Account for this as a bad debt in the income statement and reduce total receivables in the statement of financial position as at the end of the reporting period	An issue of new share capital after the end of the reporting period. A fall in the market value of investments after the end of the reporting period.
An insurance company has agreed to pay an entity's insurance claim that was still being negotiated at the end of the reporting period. The entity will account for this as 'other income' and include in the statement of financial position as a receivable.	A major new loan obtained after the end of the reporting period.
An item of inventory held at the end of the reporting period, is sold after the reporting period for less than its cost, due to its poor condition. This provides evidence that the inventory should be valued at its net realisable value, not cost, in the statement of financial position. The difference between cost and net realisable value will be treated as an expense for the year that has just ended.	The acquisition of another business, or the disposal of a part of the existing business after the reporting period.
The discovery of a fraud after the reporting period that affects the accounting figures for the reporting period.	A physical disaster such as a fire or flooding after the reporting period, that has material financial consequences for the business.

4.5 Proposed dividends

A company might propose a final dividend to its shareholders, or declare a dividend, after the reporting period but before the financial statements are authorised for issue.

In virtually all cases, proposed dividends are a non-adjusting event after the reporting period.

Practice multiple choice questions

- 1** A company has made a material change to an accounting policy in preparing its financial statements for the year. The change was not prompted by a new international financial reporting standard.

Which of the following disclosures must be made about the change in accounting policy?

- 1 The nature of and reasons for the change of accounting policy
- 2 The amount of the adjustments to the financial statement in the current financial period as a consequence of the change in policy
- 3 The amount of the adjustments to the financial statement in the previous financial period as a consequence of the change in policy
- 4 The expected amount of the adjustments to the financial statements in the next three years as a consequence of the change in policy

- A** 1 only
B 1 and 2 only
C 1, 2 and 3 only
D 1, 2, 3 and 4

(2 marks)

- 2** A company has the following transactions.

- 1 The company paid its credit suppliers \$2,000.
- 2 Goods held in inventory that cost \$2,000 were sold for \$3,000.
- 3 A credit customer whose debt of \$1,000 had been written off now pays the money owed in full.

What is the combined effect of these transactions on the company's total working capital (current assets minus current liabilities)?

- A** Increase of \$1,000
B Increase of \$2,000
C Increase of \$3,000
D Increase of \$4,000

(2 marks)

- 3** At 31 December Year 3 the following items require inclusion in a company's financial statements.

- 1 The company has paid insurance \$18,000 in Year 3 covering the period to 31 October Year 4.
- 2 On 1 January Year 3 the company made a one-year loan of \$20,000 to an employee at an interest rate of 3% per year. The employee repaid the loan in full on 1 January Year 4 together with all the interest accrued to that date.
- 3 In January Year 4 the company received rent on sub-let office premises \$8,000 covering the three-month period to 31 December Year 3.

For these three items, what amounts should be included in the statement of financial position as at 31 December Year 3 as current assets and current liabilities?

	Current assets	Current liabilities	
	\$	\$	
A	23,000	20,600	
B	35,600	15,000	
C	43,600	nil	
D	15,600	8,000	(2 marks)

4 Which of the following statements are correct, according to IAS 10 *Events after the reporting period*?

- 1 Events after the reporting period are those that occur after the reporting period has ended and before the financial statements are authorised for issue.
- 2 If inventory is sold after the reporting period at a material loss, the loss should be reflected in the financial statements as an adjusting item.
- 3 Details of all adjusting events must be disclosed in notes to the financial statements.
- 4 If the market value of investments held by an entity falls significantly after the reporting period, the details must be disclosed in a note to the financial statements.

- A** 2 and 3 only
B 1, 3 and 4 only
C 2 and 4 only
D 1, 2 and 4 only **(2 marks)**

5 In the draft statement of financial position of Company Z at 31 June Year 2, the inventory value was based on an inventory count on 4 July Year 2, which gave a total inventory value of \$363,800.

Between 30 June and 4 July Year 2 the following transactions occurred.

	\$
Purchase of goods	12,500
Sale of goods (profit margin 40% on sales)	14,000
Purchase returns by Z	600

What adjusted figure for inventories should be included in the statement of financial position of Z as at 30 June Year 2?

- A** \$360,300
B \$359,100
C \$361,900
D \$368,600 **(2 marks)**

- 6** Which of the following material events after the reporting period are adjusting events?
- 1 Discovery of a fraud relating to the past two years
 - 2 The insolvency of a credit customer who still owed money as at the end of the reporting period
 - 3 The sale of a property at a large profit.
 - 4 A property valuation providing evidence of impairment in value at the end of the reporting period
- A** 1, 2 and 4 only
B 2, 3 and 4 only
C 1 and 2 only
D 1, 2 and 3 only **(2 marks)**
- 7** Which of the following items should be treated as adjusting events after the reporting period?
- Item 1: A building owned by the company has been valued after the end of the reporting period. The valuation indicates evidence of impairment in its value as at the end of the reporting period.
- Item 2: Fraud has been discovered since the end of the reporting period, affecting the financial statements.
- A** 1 only
B 2 only
C 1 and 2
D Neither of them **(1 mark)**

Statements of cash flows

Contents	
1	Statements of cash flows: purpose and value
2	Statements of cash flows: indirect and direct methods
3	Operational cash flows: the indirect method
4	Indirect method: adjustments for working capital
5	Operational cash flows and the direct method
6	Cash flows from investing activities
7	Cash flows from financing activities

Statements of cash flows: purpose and value

- Importance of cash flow for business
- Profit and cash flow
- Purpose of a statement of cash flows
- Cash and cash equivalents

1 Statements of cash flows: purpose and value

IAS 1 states that a complete set of financial statements should include a statement of cash flows. IAS 7: **Statements of cash flows** sets out the detailed requirements for the format and content of the statement.

1.1 Importance of cash flow for business

Businesses must have sufficient cash; otherwise they cannot survive.

- A business can make a loss but still survive if it has sufficient cash or access to liquidity (cash, assets that can be quickly turned into cash and new sources of borrowing).
- On the other hand, a business that is profitable cannot survive if it cannot pay its obligations when they fall due, because it does not have enough cash or access to other sources of liquidity.

Cash flow is therefore extremely important, and it is appropriate that entities should present a statement of cash flows as a financial statement.

The purpose of a statement of cash flows is to show what the cash flows of the entity have been. It can also be used to make assessments of what the cash flows of the entity might be in the future.

The value of a statement of cash flows is that it presents information that is not available from reading a statement of comprehensive income, an income statement or a statement of financial position.

1.2 Profit and cash flow

When a business makes a profit of \$1,000, this does not mean that it receives \$1,000 more in cash than it has spent. Profit and cash flow are different, for several reasons:

There are items of cost in the income statement that do not represent a cash flow. Examples are:

- depreciation and amortisation charges
- the gain or loss on the disposal of non-current assets.

There are items of cash flow that do not appear in the income statement. Examples are:

- Cash flows relating to the acquisition or disposal of investments, such as the purchase of new non-current assets, and cash from the sale of non-current assets. (The income statement includes gains or losses on the disposal of non-current assets, but this is not the same as the cash proceeds from the sale.)
- Cash flows relating to financial transactions, such as obtaining cash by issuing shares or obtaining loans, the repayment of loans and the payment of dividends to ordinary shareholders.

1.3 Purpose of a statement of cash flows

A statement of cash flows provides information about where a business obtained its cash during the financial period, and how it made use of its cash. It also shows whether there was an increase or a decrease in the amount of cash held by the entity between the beginning and the end of the period.

A statement of cash flows groups the sources or uses of cash under three broad headings:

- cash from **operating activities**
- cash used in (or obtained from) **investing activities**
- cash paid or received in **financing activities**.

Cash from operating activities	A
Cash used in (or obtained from) investing activities	B
Cash paid or received in financing activities.	C
= Increase or decrease in cash in the period	<u>A + B + C</u>

Any of the items A, B or C could be **positive or negative cash flows**.

1.4 Cash and cash equivalents

A statement of cash flows reports the increase or decrease in cash and cash equivalents during the financial period. A statement of cash flows ends as follows:

Net cash inflow (or outflow) during the period	A
Cash and cash equivalents at the beginning of the period	B
Cash and cash equivalents at the end of the period	<u>A + B</u>

The cash inflow (or outflow) during the period can be either a positive or a negative amount.

For the purpose of a statement of cash flows, cash and cash equivalents are treated as the same:

- Cash = cash in hand (= petty cash and other cash not in the bank) + cash in the business bank account

- Cash equivalents = items that are the equivalent of cash and could be converted into cash very quickly without risk of loss (= for example cash in a deposit account or a savings account)

Statement of cash flows: indirect and direct methods

- The indirect method
- The direct method

2 Statement of cash flows: indirect and direct methods

IAS 7 provides two methods of presenting a statement of cash flows: the indirect method and the direct method. These two methods differ only in the presentation of the cash flows from operating activities. In all other respects they are exactly the same.

2.1 The indirect method

The indirect method presents the cash flows from operating activities by starting with the profit before taxation for the period, and making adjustments to the profit figure to arrive at a cash flow figure. A suggested format for the **indirect method** is given below. Illustrative figures are included.

Statement of cash flows: indirect method	\$	\$
Cash flows from operating activities		
Profit before taxation	80,000	
Adjustments for:		
Depreciation and amortisation charges	20,000	
Interest charges in the income statement	2,300	
Gains on disposal of non-current assets	(6,000)	
Losses on disposal of non-current assets	4,500	
	<u>100,800</u>	
Increase/decrease in:		
Increase in trade and other receivables	(7,000)	
Decrease in inventories	2,000	
Increase in trade payables	3,000	
	<u>98,800</u>	
Cash generated from operations	(21,000)	
Taxation paid (tax on profits)	(2,500)	
Interest charges paid		
Net cash flow from operating activities		75,300
 Cash flows from investing activities		
Purchase of property, plant and machinery	(40,000)	
Proceeds from sale of non-current assets	6,000	
Interest received/dividends received	1,500	
Net cash used in investing activities		(32,500)

Cash flows from financing activities

Proceeds from issue of shares	30,000	
Proceeds from new loan	10,000	
Repayment of loan	(17,000)	
Dividends paid to shareholders	(25,000)	
Net cash used in financing activities		(2,000)
Net increase/decrease in cash/cash equivalents		40,800
Cash/cash equivalents at the beginning of the year		5,000
Cash/cash equivalents at the end of the year		45,800

2.2 The direct method

The direct method is the same in most respects. However, the cash flows from operations are presented in a different way, as follows:

Statement of cash flows: direct method		\$
Cash flows from operating activities		
Cash receipts from customers	348,800	
Cash payments to suppliers	(70,000)	
Cash payments to employees	(150,000)	
Cash paid for other operating expenses	(30,000)	
Cash generated from operations	98,800	
Taxation paid (tax on profits)	(21,000)	
Interest charges paid	(2,500)	
Net cash flow from operating activities	75,300	

The remainder of the statement of cash flows using the direct method is exactly the same as for the indirect method.

Operational cash flows: the indirect method

- Profit before taxation
- Adjustment for depreciation and amortisation
- Adjustment for interest charges in the income statement
- Adjustment for gains or losses on disposal of non-current assets
- Working capital adjustments: introduction
- Interest paid and tax paid

3 Operational cash flows: the indirect method

With the indirect method of presenting a statement of cash flows, adjustments are made to the figure for profit before tax for the period in order to arrive at a figure for net cash flow from operating activities.

3.1 Profit before taxation

The starting point for the statement of cash flows for a company is the operating profit after deducting interest but before taxation.

This profit figure is adjusted to calculate the amount of cash received by the business or the amount of cash paid out as a consequence of its trading operations.

3.2 Adjustment for depreciation and amortisation

Depreciation charges and amortisation charges are not cash flows. They are expenses in the income statement, but do not represent payments of cash.

In order to obtain a figure for cash flow from the figure for profit, charges for depreciation and amortisation must therefore be added back to the profit figure.

3.3 Adjustment for interest charges in the income statement

Because the accruals concept is applied in accounting, the amount of interest charges in the income statement might differ from the amount of interest actually paid in the year. Interest charges are accrued for the purpose of measuring profit in the income statement, and there could be accrued interest charges in the statement of financial position.

Since interest charges (income statement) and interest payments (cash flow) might differ, it is necessary in the statement of cash flows to:

- add back the interest charge in the income statement, and
- deduct the interest actually paid (= the cash payments of interest).

The indirect method of presenting a cash flow statement therefore includes an adjustment for interest charges. The interest charge in the income statement is added back as an adjustment. The actual amount of interest paid is deducted later in the statement.

3.4 Adjustment for gains or losses on disposal of non-current assets

Gains or losses on the disposal of non-current assets are not cash flows. The gain or loss is calculated as the difference between:

- the net cash received from the disposal, and
- the carrying value (net book value) of the asset at the date of disposal.

The relevant cash flow is the net cash received from the sale. In the statement of cash flows, this is treated as a cash flow from investing activities, not a cash flow from operating activities.

To prepare a statement of cash flows using the indirect method, the gain or loss on disposal is shown as an adjustment in the calculation of operating cash flows.

Adjustments from profit to cash flow from operating activities

- Deduct any gains on the disposal of non-current assets, or
- Add any losses on the disposal of non-current assets.

These adjustments remove the effect of the gain or loss on disposal (a non-cash item) from the operating profit.

In the section on cash flows from investing activities

Include the net cash flows received from the disposal of non-current assets as cash inflows.



Example

A company disposed of an item of equipment for \$40,000. The equipment had originally cost \$60,000 and the accumulated depreciation charged up to the date of disposal was \$32,000.

	\$
Cost	60,000
Accumulated depreciation	32,000
Carrying value at date of disposal	28,000
Cash proceeds from sale	40,000
Gain on disposal	12,000

In the statement of cash flows, the gain on disposal of \$12,000 should be deducted as an adjustment to the operating profit. The cash proceeds of \$40,000 should be included as a cash inflow under the heading: 'Cash flows from investing activities'.



Exercise 1

A company made a loss on the disposal of a company motor vehicle of \$8,000. The vehicle originally cost \$50,000 and at the date of disposal, accumulated depreciation on the vehicle was \$20,000.

Required

What are the items that should be included for the disposal of the vehicle in the statement of cash flows for the year:

- (a) in the adjustments to get from operating profit to cash flow from operations?
- (b) under the heading: 'Cash flows from investing activities'?

3.5 Working capital adjustments: introduction

In the indirect method of presenting a statement of cash flows, the section on cash flows from operating activities includes adjustments for:

- inventories
- trade receivables and prepayments
- trade payables and accruals.

These adjustments are explained in the next section of this chapter.

3.6 Interest paid and tax paid

The final items in the operating cash flows part of a statement of cash flows are the amount of interest paid and the amount of tax paid in the period.

As explained earlier, the amount of interest paid might not be the amount shown in the income statement for interest charges. Similarly, the cash payments for tax might not be the same as the tax charge in the income statement.

The amount of these payments can be calculated from figures in the opening and closing statements of financial position for the period, and the income statement for the period. The method of calculating the amount of tax paid is as follows:

	\$
Liability for tax in the statement of financial position, beginning of the year	A
Taxation charge for the year	B
	<u>(A + B)</u>
Liability for tax in the statement of financial position, end of the year	C
Taxation paid in the year	<u>(A + B - C)</u>

The amount of interest paid in the year can be calculated in the same way, from the opening and closing liabilities for interest (accrued interest) and the figure for interest charges in the income statement.



Example

A company had liabilities in its statement of financial position at the beginning and at the end of Year 1, as follows:

	Liability for interest charges	Liability for taxation
Beginning of Year 1	\$4,000	\$53,000
End of Year 1	\$3,000	\$61,000

During the year, interest charges in the income statement were \$22,000 and taxation on profits were \$77,000. The amounts of interest payments and tax payments (cash flows) for inclusion in the statement of cash flows can be calculated as follows:

	Tax	Interest
	\$	\$
Liability at the beginning of the year	53,000	4,000
Taxation charge/interest charge for the year	77,000	22,000
	130,000	26,000
Liability at the end of the year	(61,000)	(3,000)
Tax paid/interest paid during the year	69,000	23,000

Indirect method: adjustments for working capital

- Working capital defined
- Changes in working capital and the effect on cash flow
- Changes in trade and other receivables
- Changes in inventory
- Changes in trade payables
- Summary of the rules for working capital changes

4 Indirect method: adjustments for working capital

With the indirect method of presenting a statement of cash flows, adjustments should be made for changes in working capital during the year.

4.1 Working capital defined

For the purpose of preparing a statement of cash flows, working capital is defined as:

	\$
Inventory	A
Plus: Trade and other receivables	B
Minus: Trade payables	(C)
Working capital	<u>A + B – C</u>

Trade and other receivables include any prepayments.

Trade payables include accrued expenses, provided the accrued expenses do not relate to other items dealt with separately in the statement of cash flows, in particular:

- accrued interest charges
- taxation payable.

Interest charges and payments for interest are presented separately in the statement of cash flows, and so accrued interest charges should be excluded from the calculation of changes in trade payables and accruals. Similarly, taxation payable is dealt with separately; therefore taxation payable is excluded from the calculation of working capital changes.

Accrued interest and accrued tax payable must therefore be deducted for the total amount for accruals, and the net accruals (after making these deductions) should be included with trade payables.

4.2 Changes in working capital and the effect on cash flow

When working capital increases, the cash flows from operations are less than the operating profit, by the amount of the increase.

Similarly, when working capital is reduced, the cash flows from operations are more than the operating profit, by the amount of the reduction.

This important point will be explained with several simple examples.

4.3 Changes in trade and other receivables

Sales revenue in a period differs from the amount of cash received from sales by the amount of the increase or decrease in receivables during the period.



Example: trade and other receivables

A company had receivables at the beginning of the year of \$6,000 and at the end of the year receivables were \$9,000. During the year, sales were \$50,000 in total. Purchases were \$30,000, all paid in cash. The company holds no inventories. The operating profit for the year was \$20,000 (\$50,000 – \$30,000).

The cash flow from operations is calculated as follows:

	\$
Receivables at the beginning of the year	6,000
Sales in the year	50,000
	<u>56,000</u>
Receivables at end of the year	(9,000)
Cash received	<u>47,000</u>
Cash paid (purchases)	30,000
Cash flow from operations	<u>17,000</u>

The cash flow is \$3,000 less than the operating profit, because receivables increased during the year by \$3,000.

The rule: adjusting from operating profit to operating cash flows to allow for receivables

- When trade and other receivables go up during the year, cash flows from operations are less than operating profit by the amount of the increase.
- When trade and other receivables go down during the year, cash flows from operations are more than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for receivables is therefore:

- subtract the increase in receivables during the period (= the amount by which closing receivables exceed opening receivables), or
- add the reduction in receivables during the period (= the amount by which opening receivables exceed closing receivables).

Prepayments in the opening and closing statement of financial position should be included in the total amount of receivables.

4.4 Changes in inventory

Purchases in a period differ from the cost of sales by the amount of the increase or decrease in inventories during the period. If all purchases were paid for in cash, this means that cash payments and the cost of sales (and profit) would differ by the amount of the increase or decrease in inventories.



Example: inventory

A company had inventory at the beginning of the year of \$5,000 and at the end of the year the inventory was valued at \$3,000. During the year, sales were \$50,000 and there were no receivables at the beginning or end of the year. Purchases were \$28,000, all paid in cash. The operating profit for the year was \$20,000, calculated as follows:

	\$
Opening inventory	5,000
Purchases in the year (all paid in cash)	28,000
	<u>33,000</u>
Closing inventory	(3,000)
Cost of sales	<u>30,000</u>
Sales	50,000
Operating profit	<u>20,000</u>

The cash flow from operations is calculated as follows:

	\$
Cash from sales in the year	50,000
Purchases paid in cash	28,000
Cash flow from operations	<u>22,000</u>

The cash flow is \$2,000 more than the operating profit, because inventory was reduced during the year by \$2,000.

The rule: adjusting from operating profit to operating cash flows to allow for changes in inventory

- When the value of inventory goes up between the beginning and end of the year, cash flows from operations are less than operating profit by the amount of the increase.
- When the value of inventory goes down between the beginning and end of the year, cash flows from operations are more than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for inventories is therefore:

- subtract the increase in inventories during the period (= the amount by which closing inventory exceeds opening inventory), or
- add the reduction in inventories during the period (= the amount by which opening inventory exceeds closing inventory).

4.5 Changes in trade payables

Payments for purchases in a period differ from purchases by the amount of increase or decrease in trade payables during the period.



Example: trade payables

A company had no inventory and no receivables at the beginning and end of the year. All its sales are for cash, and sales in the year were \$50,000. Its purchases are all on credit. During the year, its purchases were \$30,000. Trade payables at the beginning of the year were \$4,000 and trade payables at the end of the year were \$6,500.

The operating profit for the year was \$20,000 (\$50,000 – \$30,000)

	\$
Trade payables at the beginning of the year	4,000
Purchases in the year	30,000
	<u>34,000</u>
Trade payables at the end of the year	(6,500)
Cash paid to suppliers	<u>27,500</u>
Cash from sales	50,000
Cash flow from operations	<u>22,500</u>

The cash flow is \$2,500 more than the operating profit, because trade payables were increased during the year by \$2,500.

The rule: adjusting from operating profit to operating cash flows to allow for changes in trade payables

- When trade payables go up between the beginning and end of the year, cash flows from operations are more than operating profit by the amount of the increase.
- When trade payables go down between the beginning and end of the year, cash flows from operations are less than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for trade payables is therefore:

- add the increase in trade payables during the period (= the amount by which closing trade payables exceed opening trade payables), or
- subtract the reduction in trade payables during the period (= the amount by which opening trade payables exceed closing trade payables).

Accruals in the opening and closing statement of financial position should be included in the total amount of trade payables.

However, deduct interest payable and tax payable from opening and closing payables, if the total for payables includes these items.

4.6 Summary of the rules for working capital changes

The rules for working capital adjustments in a statement of cash flows (indirect method) may be summarised as follows.

Statement of cash flows:

Adjustments to get from profit before tax to cash flow from operations

Increase in trade and other receivables		Subtract
Increase in inventory		Subtract
Increase in trade payables	Add	
Decrease in trade and other receivables	Add	
Decrease in inventory	Add	
Decrease in trade payables		Subtract

This applies to the indirect method of presenting a statement of cash flows, not to the direct method.



Example

A company made an operating profit before tax of \$16,000 in the year just ended. Depreciation charges were \$15,000. There was a gain of \$5,000 on disposals of non-current assets and there were no interest charges. Values of working capital items at the beginning and end of the year were:

	Receivables	Inventory	Trade payables
Beginning of the year	\$9,000	\$3,000	\$4,000
End of the year	\$6,000	\$5,000	\$6,500

Taxation paid was \$4,800.

Required

Calculate the amount of cash generated from operations, as it would be shown in a statement of cash flows using the indirect method.

a

Answer

	\$	\$
Cash flows from operating activities		
Profit before taxation	16,000	
Adjustments for:		
Depreciation and amortisation charges	15,000	
Gains on disposal of non-current assets	(5,000)	
	<u>26,000</u>	
Decrease in trade and other receivables	3,000	
Increase in inventories	(2,000)	
Increase in trade payables	<u>2,500</u>	
Cash generated from operations	29,500	
Taxation paid (tax on profits)	<u>(4,800)</u>	
Net cash flow from operating activities		24,700

e
2

Exercise 2

During Year 1, a company made a profit before taxation of \$60,000. Depreciation charges were \$25,000 and there was a gain on the disposal of a machine of \$14,000. Interest charges and payments of interest in the year were the same amount, \$10,000. Taxation payments were \$17,000.

Values of working capital items at the beginning and end of the year were:

	Receivables	Inventory	Trade payables
Beginning of the year	\$32,000	\$49,000	\$17,000
End of the year	\$27,000	\$53,000	\$11,000

Required

Calculate the net cash from operating activities, as it would be shown in a statement of cash flows (indirect method).

Operational cash flows and the direct method

- Cash from sales
- Cash paid for wages and salaries
- Cash paid for materials supplies
- Cash paid for other expenses

5 Operational cash flows and the direct method

The format for the direct method of presenting a statement of cash flows is as follows:

Statement of cash flows: direct method	\$
Cash flows from operating activities	
Cash receipts from customers	348,800
Cash payments to suppliers	(70,000)
Cash payments to employees	(150,000)
Cash paid for other operating expenses	(30,000)
Cash generated from operations	98,800

The task is therefore to establish the amounts for cash receipts and cash payments. In an examination, you might be expected to calculate any of these cash flows from figures in the opening and closing statements of financial position, and the income statement.

You might be required to calculate:

- the cash flows from sales, from opening and closing receivables and the value of sales in the income statement, and
- the cash payments from opening and closing payables or accruals, and the cost of sales or expenses in the income statement

5.1 Cash from sales

The cash receipts from sales during a financial period can be calculated as follows:

	Source of information	\$
Trade receivables at the beginning of the year	Statement of financial position	A
Sales in the year	Income statement	B
		A + B
Trade receivables at the end of the year	Statement of financial position	(C)
Equals: Cash from sales during the year		(A + B - C)

Note: 'Income statement' means either an income statement or the 'profit and loss' section of a statement of comprehensive income.

5.2 Cash paid for wages and salaries

Cash payments for wages and salaries can be calculated in a similar way.

	Source of information	\$
Accrued wages and salaries at the beginning of the year	Statement of financial position	A
Wages and salaries expenses in the year	Income statement	B
		<u>A + B</u>
Accrued wages and salaries at the end of the year	Statement of financial position	(C)
Equals: Cash paid for wages and salaries		<u>(A + B - C)</u>

5.3 Cash paid for materials supplies

To calculate the amount of cash paid to suppliers, you might need to calculate first the amount of material purchases during the period.

	Source of information	\$
Closing inventory at the end of the year	Statement of financial position	A
Cost of sales	Income statement	B
		<u>A + B</u>
Opening inventory at the beginning of the year	Statement of financial position	(C)
Equals: Purchases in the year		<u>(A + B - C)</u>

Having calculated purchases from the cost of sales, the amount of cash payments for purchases may be calculated from purchases and opening and closing trade payables.

	Source of information	\$
Trade payables at the beginning of the year	Statement of financial position	D
Purchases in the year (as above)	Income statement	E = (A + B - C)
		<u>D + E</u>
Trade payables at the end of the year	Statement of financial position	(F)
Equals: Cash paid for materials		<u>(D + E - F)</u>

5.4 Cash paid for other expenses

Other expenses in the income statement usually include depreciation charges, which are not cash flows. Depreciation charges should therefore be excluded from other expenses when calculating cash payments.

Cash payments for other expenses can be calculated as follows.

	Source of information	\$
Payables for other expenses at the beginning of the year	Statement of financial position	A
Other expenses in the year, excluding depreciation and amortisation	Income statement	B
		<u>A + B</u>
Payables for other expenses at the end of the year	Statement of financial position	(C)
Equals: Cash paid for other expenses		<u>(A + B - C)</u>

Payables for other expenses should exclude accrued wages and salaries, accrued interest charges and taxation payable.



Example

The following information has been extracted from the financial statements of Hopper Company for the year ended 31 December Year 7.

	\$
Sales	1,280,000
Cost of sales	<u>(400,000)</u>
Gross profit	880,000
Wages and salaries	(290,000)
Other expenses (including depreciation \$25,000)	<u>(350,000)</u>
	240,000
Interest charges	<u>(50,000)</u>
Profit before tax	190,000
Tax on profit	<u>(40,000)</u>
Profit after tax	<u>150,000</u>

Extracts from the statements of financial position:

	At 1 January Year 7	At 31 December Year 7
	\$	\$
Trade receivables	233,000	219,000
Inventory	118,000	124,000
Trade payables	102,000	125,000
Accrued wages and salaries	8,000	5,000
Accrued interest charges	30,000	45,000
Tax payable	52,000	43,000

Required

Present the cash flows from operating activities as they would be presented in a statement of cash flows:

- using the direct method
- using the indirect method.

a**Answer****Workings: direct method**

Cash from sales	\$
Trade receivables at 1 January Year 7	233,000
Sales in the year	1,280,000
	1,513,000
Trade receivables at 31 December Year 7	(219,000)
Cash from sales during the year	1,294,000
Cash paid for wages and salaries	\$
Accrued wages and salaries at 1 January Year 7	8,000
Wages and salaries expenses in the year	290,000
	298,000
Accrued wages and salaries at 31 December Year 7	(5,000)
Cash paid for wages and salaries	293,000
Purchases	\$
Closing inventory at 31 December Year 7	124,000
Cost of sales	400,000
	524,000
Opening inventory at 1 January Year 7	(118,000)
Purchases in the year	406,000
Cash paid for materials supplies	\$
Trade payables at 1 January Year 7	102,000
Purchases in the year (as above)	406,000
	508,000
Trade payables at 31 December Year 7	(125,000)
Cash paid for materials	383,000

Cash paid for other expenses is the amount for expenses in the income statement after deducting the depreciation charge: \$350,000 - \$25,000 = \$325,000.

Interest and tax payments	Tax	Interest
	\$	\$
Liability at the beginning of the year	52,000	30,000
Taxation charge/interest charge for the year	40,000	50,000
	92,000	80,000
Liability at the end of the year	(43,000)	(45,000)
Tax paid/interest paid during the year	49,000	35,000

Statement of cash flows: direct method \$

Cash flows from operating activities	
Cash receipts from customers	1,294,000
Cash payments to suppliers	(383,000)
Cash payments to employees	(293,000)
Cash paid for other operating expenses	(325,000)
Cash generated from operations	293,000
Taxation paid (tax on profits)	(49,000)
Interest charges paid	(35,000)
Net cash flow from operating activities	209,000

Statement of cash flows: indirect method \$

Cash flows from operating activities	
Profit before taxation	190,000
Adjustments for:	
Depreciation and amortisation charges	25,000
Interest charges in the income statement	50,000
	265,000
Decrease in receivables (233,000 – 219,000)	14,000
Increase in inventories (124,000 – 118,000)	(6,000)
Increase in trade payables	20,000
(125,000 + 5,000) – (102,000 + 8,000)	
Cash generated from operations	293,000
Taxation paid	(49,000)
Interest charges paid	(35,000)
Net cash flow from operating activities	209,000

Cash flows from investing activities

- Cash paid for the purchase of non-current assets
- Cash from disposals of non-current assets

6 Cash flows from investing activities

The second part of a statement of cash flows, after cash flows from operating activities, is cash flows from investing activities.

This section of the statement of cash flows includes interest received and dividends received on investments. However, for the purpose of the examination, the most important items in this part of the statement are cash paid to purchase non-current assets and cash received from the sale or disposal of non-current assets.

6.1 Cash paid for the purchase of non-current assets

You might be required in the examination to calculate the amount spent on the purchase of non-current assets, to include in the section on 'Cash flows from investing activities'. In an examination question, you may be given the following information to make this calculation:

- non-current assets at the beginning of the year (at cost or valuation, or at net book value)
- non-current assets at the end of the year (at cost or valuation, or at net book value)
- the depreciation charge for the year
- information about disposals of non-current assets during the year
- information about the revaluation of non-current assets during the year.

When there are no disposals or revaluations during the year

When there are no disposals or revaluations of non-current assets during the year, purchases of non-current assets (normally assumed to be the amount of cash paid for these purchases) may be calculated as:

- non-current assets at cost at the end of the year minus non-current assets at cost at the beginning of the year, or
- non-current assets at net book value (NBV) at the end of the year minus non-current assets at NBV at the beginning of the year, plus the depreciation charge for the year.



Example

The plant and equipment of PM Company at the beginning and the end of its financial year were as follows:

	At cost	Accumulated depreciation	Net book value
	\$	\$	\$
Beginning of the year	180,000	(30,000)	150,000
End of the year	240,000	(50,000)	190,000

There were no disposals of plant and equipment during the year.

The cash paid for plant and equipment in the year (= purchases) may be calculated in either of the following ways.

	\$		\$
At cost at the end of the year	240,000	NBV at the end of the year	190,000
At cost at the beginning of the year	180,000	NBV at the beginning of the year	150,000
Purchases	60,000	Increase in NBV	40,000
		Depreciation (50,000 – 30,000)	20,000
		Purchases	60,000

When there are disposals during the year

When there are disposals of non-current assets during the year, the purchases of non-current assets may be calculated as follows:

	\$
Assets at cost at the end of the year	A
Assets at cost at the beginning of the year	B
	(A – B)
Disposals during the year: original asset cost	C
Purchases	A – B + C



Example

The motor vehicles of PM Company at the beginning and the end of its financial year were as follows:

	At cost	Accumulated depreciation	Net book value
	\$	\$	\$
Beginning of the year	150,000	(105,000)	45,000
End of the year	180,000	(88,000)	92,000

During the year a vehicle was disposed of for a gain of \$3,000. The original cost of this asset was \$60,000.

The cash paid for plant and machinery in the year (= purchases) may be calculated as follows.

	\$
Assets at cost at the end of the year	180,000
Assets at cost at the beginning of the year	150,000
	<u>30,000</u>
Disposals during the year: original asset cost	60,000
Purchases	<u>90,000</u>

When there are revaluations during the year

When there are revaluations of non-current assets during the year, the purchases of non-current assets should be calculated as follows.

Purchases of property, plant and equipment	\$
Property, plant and equipment:	
At cost or valuation, at the end of the year	A
At cost or valuation, at the beginning of the year	B
	<u>A – B</u>
Add: Cost/re-valued amount of assets disposed of in the year	C
Subtract: Any asset revaluation during the year	(D)
Purchases during the year	<u>(A – B) + C – D</u>



Example

The statements of financial position of Grand Company at the beginning and end of Year 1 include the following information:

Property, plant and equipment	Beginning of Year 1	End of Year 1
	\$	\$
At cost/re-valued amount	1,400,000	1,900,000
Accumulated depreciation	<u>350,000</u>	<u>375,000</u>
Carrying value	<u>1,050,000</u>	<u>1,525,000</u>

During the year, some property was re-valued upwards by \$200,000. An item of equipment was disposed of during the year at a profit of \$25,000. This equipment had an original cost of \$260,000 and accumulated depreciation of \$240,000 at the date of disposal.

Purchases of property, plant and equipment during the year were as follows:

	\$
At cost/re-valued amount, at the end of the year	1,900,000
At cost/re-valued amount, at the beginning of the year	1,400,000
	<u>500,000</u>
Add: Cost of assets disposed of in the year	260,000
Subtract: Asset revaluation during the year	<u>(200,000)</u>
Purchases during the year	<u>560,000</u>

6.2 Cash from disposals of non-current assets

A statement of cash flows should include the net cash received from any disposals of non-current assets during the period.

This might have to be calculated from the gain or loss on disposal and the carrying amount of the asset at the time of its disposal.

Disposal of property, plant and equipment

Property, plant and equipment:	\$
At cost (or re-valued amount at the time of disposal)	A
Accumulated depreciation, at the time of disposal	<u>(B)</u>
Net book value/carrying amount at the time of disposal	(A – B)
Gain or (loss) on disposal	<u>C</u>
Net disposal value (= assumed cash flow)	<u>(A – B) + or – C</u>

If there is a gain on disposal, the net cash from the disposal is more than the net book value.

If there is a loss on disposal the net cash from the disposal is less than the net book value.

e

Example

During an accounting period, an entity disposed of some equipment and made a gain on disposal of \$6,000. The equipment originally cost \$70,000 and at the time of its disposal, the accumulated depreciation on the equipment was \$56,000.

What was the amount of cash obtained from the disposal of the asset?

a

Answer

Disposal of equipment	\$
At cost	70,000
Accumulated depreciation, at the time of disposal	<u>(56,000)</u>
Net book value/carrying amount at the time of disposal	14,000
Gain on disposal	<u>6,000</u>
Net disposal value (= assumed cash flow)	<u>20,000</u>

This cash flow would be included in the cash flows from investing activities.



Exercise 3

At 1 January Year 6, the property, plant and equipment in the statement of financial position of NC Company amounted to \$329,000 at cost or valuation. At the end of the year, the property, plant and equipment was \$381,000 at cost or valuation.

During the year, a non-current asset that cost \$40,000 (and has not been re-valued) was disposed of at a loss of \$4,000. The accumulated depreciation on this asset at the time of disposal was \$21,000.

Another non-current asset was re-valued upwards during the year from \$67,000 (cost) to \$102,000.

Required

Calculate the following amounts, for inclusion in the cash flows from investing activities section of the company's statement of cash flows for Year 6:

- the purchase of property, plant and equipment
- proceeds from the sale of non-current assets.

Cash flows from financing activities

- Cash from new share issues
- Cash from new loans/cash used to repay loans
- Dividend payments to equity shareholders

7 Cash flows from financing activities

The third part of a statement of cash flows, after cash flows from investing activities, is cash flows from financing activities.

This section of the statement of cash flows includes:

- Cash received from issuing shares
- Cash received from new loans or issues of bonds
- Cash paid to repay a loan or redeem bonds
- Usually, dividends paid to equity shareholders.

7.1 Cash from new share issues

The cash raised from new share issues can be established by comparing the equity share capital and the share premium in the statements of financial position at the beginning and the end of the year.

	\$
Share capital + Share premium at the end of the year	A
Share capital + Share premium at the beginning of the year	B
= Cash obtained from issuing new shares in the year	<u>(A – B)</u>



Example

The statements of financial position of Entity PLM at 1 January and 31 December included the following items:

	1 January Year 1	31 December Year 1
	\$	\$
Equity shares of \$1 each	600,000	750,000
Share premium	800,000	1,100,000

The cash obtained from issuing shares during the year is calculated as follows.

	\$
Share capital + Share premium at the end of Year 1	1,850,000
Share capital + Share premium at the beginning of Year 1	1,400,000
= Cash obtained from issuing new shares in Year 1	<u>450,000</u>

7.2 Cash from new loans/cash used to repay loans

Cash from new loans or cash paid to redeem loans in the year can be calculated simply by looking at the difference between the liabilities for loans and bonds at the beginning and the end of the year.

- An increase in loans or bonds means there has been an inflow of cash.
- A reduction in loans or bonds means there has been a payment (outflow) of cash.

Remember to add any loans, loan notes or bonds repayable within one year (current liability) to the loans, loan notes or bonds repayable after more than one year (non-current liability) to get the total figure for loans, loan notes or bonds.

	\$
Loans at end of year (current and non-current liabilities)	A
Loans at beginning of year (current and non-current liabilities)	B
If A>B, cash inflow from loans in the year	<u>(A – B)</u>
If B>A, cash outflow to repay loans in the year	

Note: The same calculation can be applied to bonds or loan notes that the company might have issued. Bonds and loan notes are long-term debt.



Example

The statements of financial position of Entity PLM at 1 January and 31 December included the following items:

	1 January Year 1	31 December Year 1
	\$	\$
Loans repayable within 12 months	760,000	400,000
Loans repayable after 12 months	1,400,000	1,650,000

The cash flows relating to loans during the year are calculated as follows.

	\$
Loans outstanding at the end of Year 1	2,050,000
Loans outstanding at the beginning of Year 1	<u>2,160,000</u>
= Net loan repayments during the year (= cash outflow)	<u>110,000</u>

7.3 Dividend payments to equity shareholders

These should be the final dividend payment from the previous year and the interim dividend payment for the current year. The dividend payments during the year are shown in the statement of changes in equity (SOCIE). However, in an examination question you might be expected to calculate dividend payments from figures for retained earnings and the profit after tax for the year.

If there have been no transfers to the retained earnings reserve from the revaluation reserve in the year, the equity dividend payments can be calculated as follows:

	\$
Retained earnings reserve at the beginning of the year	A
Profit for the year after tax	B
Increase in the retained earnings reserve	A + B
Retained earnings reserve at the end of the year	(C)
Equity dividend payments	<u>(A + B) – C</u>



Example

From the following information, calculate the cash flows from investing activities for Penron Company in Year 1.

	Beginning of Year 1	End of Year 1
	\$	\$
Share capital (ordinary shares)	400,000	500,000
Share premium	275,000	615,000
Retained earnings	390,000	570,000
	<u>1,065,000</u>	<u>1,685,000</u>
Loans repayable after more than 12 months	600,000	520,000
Loans repayable within 12 months or less	80,000	55,000

The company made a profit of \$420,000 for the year after taxation.

Required

Calculate for year 1, for inclusion in the statement of cash flows:

- the cash from issuing new shares
- the cash flows received or paid for loans
- the payment of dividend to ordinary shareholders.



Answer

Workings

Proceeds from new issue of shares	\$
Share capital and share premium:	
At the end of the year (500,000 + 615,000)	1,115,000
At the beginning of the year (400,000 + 275,000)	675,000
Proceeds from new issue of shares during the year	<u>440,000</u>

Repayment of loans		\$
Loans repayable:		
At the end of the year (520,000 + 55,000)		575,000
At the beginning of the year (600,000 + 80,000)		680,000
Repayment of loans during the year		<u>105,000</u>
		\$
Payment of dividends		
Retained earnings at the beginning of the year		390,000
Profit after taxation for the year		420,000
		<u>810,000</u>
Retained earnings at the end of the year		570,000
Dividends paid during the year		<u>240,000</u>

Cash flows from financing activities can now be presented as follows.

Cash flows from financing activities	\$	\$
Proceeds from issue of shares	440,000	
Repayment of loans	(105,000)	
Dividends paid to shareholders	<u>(240,000)</u>	
Net cash from financing activities		<u>95,000</u>

Practice multiple choice questions

- 1 A draft statement of cash flows contains the following calculation of net cash inflow from operating activities.

	\$m
Operating profit	18
Depreciation	4
Decrease in inventories	(3)
Increase in trade and other receivables	(5)
Reduction in trade payables	2
Net cash flow from operating activities	<u>16</u>

Which of the following corrections need to be made to the calculation?

- 1 Depreciation should be deducted, not added
- 2 Decrease in inventories should be added, not deducted
- 3 Increase in receivables should be added, not deducted
- 4 Reduction in payables should be deducted, not added

- A** 1 and 3
B 2 and 4
C 3 and 4
D 1 and 2

(2 marks)

- 2** A limited liability company sold a building at a loss.
 How will this transaction be treated in the company's statement of cash flows?

	Proceeds of sale	Profit on sale
A	Cash inflow under Financing activities	Added to profit in calculating cash flow from operating activities
B	Cash inflow under Investing activities	Deducted from profit in calculating cash flow from operating activities
C	Cash inflow under Investing activities	Added to profit in calculating cash flow from operating activities
D	Cash inflow under Financing activities	Deducted from profit in calculating cash flow from operating activities

(2 marks)

- 3** Which of the following items might appear as items in the statement of cash flows of a company?

- 1 Tax paid
 2 Revaluation of non-current assets
 3 Bonus issue of shares
 4 Rights issue of shares

- A** 1 and 2
B 2 and 4
C 2 and 3
D 1 and 4

(2 marks)

- 4** The following items are included in the statement of financial position of a company as at 1 January and 31 December in the same year. The company's financial year ends on 31 December.

	Share capital	Share premium	Non-current liabilities: loans	Current liabilities: loans
	\$	\$	\$	\$
At 1 January	300,000	100,000	60,000	15,000
At 31 Dec	500,000	300,000	40,000	20,000

From this information, what cash flows would be included in 'cash flows from financing activities' in the company's statement of cash flows for the year?

- A** Cash inflow of \$200,000 for issue of share capital and cash outflow of \$20,000 for repayment of loans
 - B** Cash inflow of \$400,000 for issue of share capital and cash outflow of \$20,000 for repayment of loans
 - C** Cash inflow of \$200,000 for issue of share capital and cash outflow of \$15,000 for repayment of loans
 - D** Cash inflow of \$400,000 for issue of share capital and cash outflow of \$15,000 for repayment of loans
- (2 marks)**

Incomplete records

Contents	
1	The nature of incomplete records
2	Techniques for incomplete records

The nature of incomplete records

- The meaning of incomplete records
- Dealing with incomplete records

1 The nature of incomplete records

1.1 The meaning of incomplete records

Incomplete records, as the term suggests, are accounting records where information is missing. Problems of incomplete records often arise with small businesses of sole traders. The owner of the business does not bother to keep up-to-date accounting records, and does not have a double entry book-keeping system. He simply keeps invoices or receipts for expenses and copies of invoices to customers. In addition, details of bank transactions can be obtained from a bank statement or other banking records.

The task of the accountant is to use these invoices, receipts and banking records, together with other information obtained from the business owner, to prepare financial statements for the year (and in particular an income statement, which provides a basis for calculating the taxable income of the business owner from his or her business).

1.2 Dealing with incomplete records

In examinations, questions on incomplete records are useful for testing knowledge and understanding of book-keeping and accounts. The task is often to identify the missing figures that the incomplete records do not provide.

Examples of incomplete records described in this chapter include:

- establishing the value of assets and liabilities to calculate the business capital, particularly opening capital at the start of the financial period
- using memorandum control accounts, for receivables or payables, to calculate the sales or purchases for the period
- using a memorandum account for bank and cash transactions, to establish a missing figure for cash income or cash payments, such as a missing figure for cash taken from the business by the owner as drawings
- using the gross profit percentage to establish a cost of sales, or a missing figure such as the value of inventory stolen or lost in a fire.

Techniques for incomplete records

- Calculation of opening capital
- Memorandum control accounts
- Memorandum cash and bank account
- Using the gross profit percentage and mark-up percentage
- Missing inventory figure
- Profit and opening and closing net assets

2 Techniques for incomplete records

2.1 Calculation of opening capital

Occasionally, it might be necessary to establish the opening capital of a sole trader. This can be done simply by obtaining figures for the assets and liabilities of the business at the beginning of the financial period. Opening capital is the difference between total assets and total liabilities. (Non-current assets for this purpose are measured at their carrying amount, i.e. net book value.)



Example

A sole trader does not keep any accounting records, and you have been asked to prepare an income statement and statement of financial position for the financial year just ended. To do this, you need to establish the opening capital of the business at the beginning of the year.

You obtain the following information about assets and liabilities at the beginning of the year:

	\$
Motor van (balance sheet valuation)	1,600
Bank overdraft	560
Cash in hand	50
Receivables	850
Trade payables	370
Payables for other expenses	90
Inventory	410

Required

Calculate the capital of the business as at the beginning of the year.

a**Answer**

	\$	\$
Assets		
Motor van (balance sheet valuation)		1,600
Inventory		410
Receivables		850
Cash in hand		50
Total assets		<u>2,910</u>
Liabilities		
Bank overdraft	560	
Trade payables	370	
Payables for other expenses	90	
Total liabilities		<u>1,020</u>
Net assets = Capital		<u>1,890</u>

2.2 Memorandum control accounts

A memorandum account is an account that is not a part of a proper ledger accounting system. When there are incomplete records, a memorandum account can be used to calculate a 'missing' figure, such as a figure for sales or purchases and expenses in the period.

Calculating a missing figure for sales

The records of a sole trader might be incomplete because the trader does not keep any record of sales in the period. However, it might be possible to obtain the following figures:

- receivables at the beginning of the year (from last year's balance sheet)
- receivables at the end of the year, from copies of unpaid sales invoices
- money banked during the year (assumed to be money from customers for sales)
- any bad debts written off.

Where a business makes some sales for cash, there might also be a figure for cash sales where the money has not been banked. The amount of these cash sales might be calculated from the sum of:

- the increase in cash in hand at the end of the year plus
- any expenses paid in cash, for which receipts are available.

e**Example**

An accountant is looking through the records of a sole trader who does not have a bookkeeping system. He has established the following information.

	\$
Receivables at the beginning of the year	650
Receivables at the end of the year	720
Bad debt written off during the year	800
Money paid into the business bank account	58,600
Cash sales where the money was not banked	300

The sales for the year can be calculated as the balancing figure in a receivables memorandum account.

Receivables memorandum account			
	\$		\$
Opening balance	650	Money banked	58,600
Sales	59,770	Cash sales, money not banked	300
(= balancing figure, 60,420 – 650)		Bad debt written off	800
		Closing balance	720
	<u>60,420</u>		<u>60,420</u>

The same calculation could be presented in a vertical format, as follows:

	\$
Receivables at the beginning of the year	650
Receivables at the end of the year	720
Increase/(decrease) in receivables	70
Money paid into the business bank account	58,600
Cash sales where the money was not banked	300
Bad debt written off during the year	800
Sales for the year	<u>59,770</u>



Exercise 1

From the following information calculate the sales for the period:

	\$
Receivables at the start of the period	2,400
Receivables at the end of the period	1,800
Cash banked during the period	12,500
Bad debt written off	200

Calculating the missing figure for purchases

**Example**

An accountant is looking through the records of a sole trader who does not have a book-keeping system. He has established the following information.

	\$
Payables at the beginning of the year	1,200
Payables at the end of the year	1,800

Money paid out of the business bank account to suppliers 18,700

The purchases for the year can be calculated as the balancing figure in a payables memorandum account.

Payables memorandum account			
	\$		\$
Cash paid	18,700	Opening balance	1,200
Closing balance	1,800	Purchases (balancing figure)	19,300
	<u>20,500</u>		<u>20,500</u>

The same calculation could be presented in a vertical format, as follows:

	\$
Payables at the beginning of the year	1,200
Payables at the end of the year	1,800
Increase/(decrease) in receivables	600
Money paid out of the business bank account	18,700
Purchases for the year	<u>19,300</u>

**Exercise 2**

From the following information calculate the purchases for the period:

	\$
Payables at the start of the period	1,400
Payables at the end of the period	1,900
Cash paid to suppliers during the period	11,300

2.3 Memorandum cash and bank account

A memorandum account may also be used to record transactions in cash (notes and coins) and through the bank account, in order to establish a missing figure for a cash payment or possibly a cash receipt.

You might be given figures for:

- cash in hand and in the bank account at the beginning of the year
- cash in hand and in the bank account at the end of the year
- cash receipts (cash, cheques and other forms of receiving money)
- payments during the period for purchases, salaries and other cash expenses.

If there is a missing figure for a cash payment, this should emerge as a balancing figure.

Note: Cash in hand consists of banknotes and coins. Often, it is just petty cash. However, some businesses hold a large amount of cash in hand because they sell goods for cash; for example, retail stores may hold fairly large quantities of cash in hand.



Example

An accountant is trying to prepare the financial statements of a sole trader from incomplete records. A problem is that the owner of the business admits to having taken cash from the business, but he has not kept a record of how much he has taken. The accountant has established the following information:

	\$
Cash in hand at the beginning of the year	200
Bank balance at the beginning of the year	2,300
Cash in hand at the end of the year	500
Bank balance at the end of the year	3,500
Receipts	42,800
Payments to employees	12,800
Payments to suppliers	17,100
Payments of interest/bank charges	400

Required

From this information, calculate the cash drawings by the owner during the year.

a**Answer**

The drawings for the year can be calculated as the balancing figure in a cash and bank memorandum account.

Cash and bank memorandum account			
	\$		\$
Opening balance, cash in hand	200	Payments to suppliers	17,100
Opening balance, bank	2,300	Payments to employees	12,800
Receipts	42,800	Payments of interest/bank charges	400
		Drawings (= balancing figure)	11,000
		Closing balance, cash in hand	500
		Closing balance, bank	3,500
	<u>45,300</u>		<u>45,300</u>

The same calculation could be presented in a vertical format, as follows:

	\$	\$
Cash in hand and bank at the beginning of the year		2,500
Receipts during the year		<u>42,800</u>
		45,300
Payments to suppliers	17,100	
Payments to employees	12,800	
Payments for interest/bank charges	<u>400</u>	
Total payments recorded		<u>(30,300)</u>
		15,000
Cash in hand and bank at the end of the year		<u>(4,000)</u>
Difference = missing figure = drawings		<u>11,000</u>

e
3**Exercise 3**

From the following information calculate the owner's drawings for the period:

	\$
Cash in hand at the beginning of the year	100
Bank balance at the beginning of the year	3,400
Cash in hand at the end of the year	150
Bank balance at the end of the year	5,200
Receipts	51,700
Payments to employees	3,400
Payments to suppliers	38,200

2.4 Using the gross profit percentage and mark-up percentage

Missing figures can sometimes be estimated by using an average gross profit margin or a mark-up percentage on cost to establish either the sales for a period or the cost of sales.

- The gross profit margin is the gross profit as a percentage of sales.
- A mark up on cost is a percentage added to the cost of sales figure.



Example

A sole trader does not keep a record of sales. However, she does keep a record of purchases. The accountant has established that the gross profit margin is 20%, and that:

- opening inventory was \$700 at the beginning of the year
- closing inventory is \$1,200 at the end of the year
- purchases during the year were \$23,500.

Required

Calculate the sales for the year.



Answer

There is enough information to calculate the cost of sales for the year. The gross profit percentage can then be used to calculate the sales for the year. If the gross profit is 20% (= gross profit/sales), the mark-up on cost is 25% of cost (= $20 / (100 - 20)$).

	\$
Opening inventory	700
Purchases	23,500
	<u>24,200</u>
Closing inventory	(1,200)
Cost of sales	<u>23,000</u>
Gross profit (25% of cost)	5,750
Sales	<u>28,750</u>



Exercise 4

A business operates on the basis of a mark up on cost of 40%. The following information is available:

Opening inventory	\$3,100
Closing inventory	\$4,000
Purchases	\$42,100

Required

What is the sales figure for the year?

2.5 Missing inventory figure

The gross profit margin can also be used to establish the value of inventory that is missing or lost, for example due to theft or a fire. In these situations, you might know the value of sales in the period, purchases during the period and opening and closing inventory.

By calculating the cost of sales from sales and the gross profit margin, it should be possible to establish the value of missing inventory that is unaccounted for, as a balancing figure.



Example

A sole trader operates his business from a warehouse, which has been damaged by a fire, which occurred at the end of the financial year. After the fire, the remaining inventory that is undamaged amounts to \$2,000 (cost).

The accountant establishes the following information:

- Inventory at the beginning of the year was \$16,000
- Purchases during the year were \$115,000
- Sales during the year were \$140,000
- The trader sells his goods at a mark-up of 25% of cost.

Required

Calculate the cost of the inventory lost in the fire.



Answer

Gross profit = 25% of cost.

As a proportion of sales, gross profit = $(25 / (25 + 100)) = 0.20$ or 20%.

Sales = \$140,000.

Therefore gross profit = $20\% \times \$140,000 = \$28,000$

Cost of sales = $80\% \times \$140,000 = \$112,000$.

	\$
Opening inventory	16,000
Purchases	115,000
	131,000
Cost of sales	(112,000)
Closing inventory should be	19,000
Actual closing inventory	2,000
Balancing figure = inventory lost in the fire	17,000



Exercise 5

A business operates on the basis of a mark up on cost of 40%. The following information is available:

Opening inventory	\$5,000
Purchases	\$61,200
Sales	\$98,000

What is the amount of closing inventory?

2.6 Profit and opening and closing net assets

You might also need to remember that the profit or loss for a period can be calculated from the opening and closing net assets (assets minus liabilities, which is equity capital) and any drawings during the period.

An extension of the basic accounting equation is:

$$\text{Increase in net assets} = \text{Profit} + \text{capital introduced} - \text{drawings}$$

The profit figure can be calculated as follows:

	\$
Closing assets – liabilities	A
Opening assets – liabilities	B
Increase/(decrease) in net assets in the period	(A – B)
Add drawings	C
Subtract new capital introduced by the owner(s)	(D)
Balance = profit /(loss) for the year	(A – B) + C – D



Example

At 1 January Year 1, the business of Tom Canute had assets of \$214,000 and liabilities of \$132,000. At 31 December, the business had assets of \$281,000 and liabilities of \$166,000. Tom took \$25,000 in cash and \$3,000 in goods out of the business during the year for his personal use. He did not introduce any new capital.

Required

Calculate the profit of the business in the year to 31 December Year 1.

a**Answer**

	\$	\$
Assets at 31 December Year 1		281,000
Liabilities at 31 December Year 1		166,000
Net assets at 31 December Year 1		115,000
Assets at 1 January Year 1	214,000	
Liabilities at 1 January Year 1	132,000	
Net assets at 1 January Year 1		82,000
Increase in net assets during the year		33,000
Add: Drawings (25,000 + 3,000)		28,000
Balance = Profit /(loss) for the year		61,000

Alternatively the profit figure could be calculated using the equation:

Increase in net assets	=	Profit + Capital introduced – Drawings
\$33,000	=	Profit + 0 – \$28,000
Profit	=	\$61,000

Practice multiple choice questions

- 1** A fire on 31 March destroyed some of the inventory of a company, and its inventory records were also lost. The following information is available.

	\$
Inventory at 1 March	127,000
Purchases for March	253,000
Sales for March	351,000
Inventory in good condition at 31 March	76,000

The company makes a standard gross profit of 30% on its sales.

What was the cost of the inventory lost in the fire?

- A** \$45,000
B \$134,300
C \$34,000
D \$58,300

(2 marks)

- 2** A retailer makes sales entirely for cash. He fixes the selling prices for goods at double their cost. Transactions for the month of March were as follows.

\$

1 March: Inventory	80,000
Cash banked for the month	190,000
Purchases for the month	120,000
31 March: Inventory	100,000

Which TWO of the following conclusions might be made SEPARATELY from this information?

- 1 Goods costing \$5,000 have been stolen
- 2 Goods costing \$10,000 have been stolen
- 3 \$10,000 in cash was stolen from sales receipts before they were banked
- 4 Goods costing \$5,000 were sold at cost price.

- A** 1 and 3
B 2 and 3
C 2 and 4
D 1 and 4

(2 marks)

- 3** The accountant for a sole trader has established that the total assets of the business at 31 December Year 4 were \$376,000 and total liabilities were \$108,000. Checking the previous year's financial statements, he was able to establish that at 31 December Year 3 total assets were \$314,000 and total liabilities were \$87,000. During Year 4 the owner has taken out drawings of \$55,000. In December Year 4 the owner had been obliged to input additional capital of \$25,000.

What was the profit of the business for the year to 31 December Year 4?

- A** \$11,000
B \$67,000
C \$71,000
D \$121,000

(2 marks)

Consolidated Financial Statements

Contents

- 1 The nature of a group and consolidated accounts
- 2 Consolidated statement of financial position: the basic rules
- 3 Consolidated statement of financial position: purchased goodwill
- 4 Consolidated statement of financial position: non-controlling interests
- 5 Consolidated statement of financial position: fair value adjustments
- 6 Consolidated statement of comprehensive income
- 7 Intra-group adjustments

The nature of a group and consolidated accounts

- A group of companies: parent and subsidiaries
- Statement of financial position of the parent: accounting for a subsidiary
- Purpose and nature of consolidated financial statements
- The effect of the parent/subsidiary relationship on the financial statements
- International accounting standards and consolidated accounts
- The requirement to prepare consolidated accounts
- The requirement to include all subsidiaries
- Common reporting date
- Uniform accounting policies

1 The nature of a group and consolidated accounts

1.1 A group of companies: parent and subsidiaries

A group consists of a parent entity and one or more subsidiary entities. (There may also be 'associates' in a group: these are described in a later chapter).

- An entity is a **subsidiary** of another entity if it is **controlled** by that other entity. 'Control' usually means that more than 50% of its equity shares are owned by that other entity.
- Within a group, Company C might be a subsidiary of Company B, which is a subsidiary of Company A. Company C is then a sub-subsidiary of Company A. Group structures with sub-subsidiaries are not examinable.
- The entity that ultimately controls all the entities in the group is called the **parent**.

A parent is defined as 'an entity that has one or more subsidiaries' (IAS27).

Definition of 'control'

Control is assumed to exist when the parent owns directly, or indirectly through other subsidiaries, more than half of the voting power of the entity, unless in exceptional circumstances it can be clearly demonstrated that such control does not exist.

Control also exists when the entity (= parent) owns half or less than half of the voting power of the entity but any of the following circumstances also applies:

- The entity has power over more than half of the voting rights in the subsidiary by virtue of an agreement with other investors.
- The entity has power to govern the financial and operating policies of the subsidiary entity under a statute or agreement.

- The entity has power to appoint or remove a majority of the members of the board of directors of the subsidiary, and the board of directors has control over the entity.
- The entity has power to cast a majority of votes at meetings of the board of directors of the subsidiary, and the board of directors has control over the entity.

1.2 Statement of financial position of the parent: accounting for a subsidiary

A subsidiary is acquired by purchasing a controlling interest in its equity. The parent makes a long-term investment in the subsidiary. In the statement of financial position of the parent, there is a non-current asset:

‘Investment in subsidiary, at cost’

In some groups, the parent company has no assets at all except shares in the subsidiaries in the group. A parent whose main assets (or only assets) are shares in subsidiaries is sometimes called a **holding company**. You might see both terms, ‘parent’ and ‘holding company’: treat them as meaning the same.

1.3 Purpose and nature of consolidated financial statements

When a large part of the assets of the parent consists of investments in subsidiaries, it is difficult for the users of the financial statements of the parent to understand anything about its financial position or financial performance. If a parent company only reported to its shareholders about the financial performance and position of the parent itself, the statement of financial information might contain little more than ‘investments in subsidiaries at cost’ and the profit for the year might consist of little more than ‘dividends received’ from the investments.

To find out meaningful information about their investment, users of the parent’s financial statements need to know about the financial position and performance of the operating subsidiaries in the entire group of companies.

The purpose of consolidated financial statements is to provide financial statements that have meaning and relevance to users. When a parent acquires a subsidiary, both the parent and the subsidiary remain legally separate entities. However, in practice they operate as if they were one organisation. Consolidated financial statements reflect the reality (or substance) of the situation: the group is a **single economic unit**.

In preparing consolidated financial statements:

- the profits of the parent and its subsidiaries, and their other comprehensive income, are combined into a single in a consolidated statement of comprehensive income
- the assets and liabilities of the parent and its subsidiaries are combined in a single consolidated statement of financial position. (However, the share capital and reserves for the consolidated balance sheet are not calculated simply by adding the capital and reserves of all the companies in the group!).

1.4 The effect of the parent/subsidiary relationship on the financial statements

A parent and a subsidiary are **related parties** of each other, because the parent controls the subsidiary.

This relationship often has an effect on the profit or loss, or on the financial position of both entities, because they may enter into transactions with each other on terms that other entities or individuals (unrelated parties) would not.

For example:

- an entity might sell goods to its parent or fellow-subsubsidiaries on more favourable terms than it would sell to other customers
- a parent company may make supplies to a struggling subsidiary on more favourable terms than it would to other companies. This would boost the apparent profitability of that subsidiary.
- the only or main reason for a subsidiary's existence might be to produce goods or to provide services for the parent to use in its own operations.

In all these situations, the financial performance and financial position reported by the **separate financial statements of the subsidiary** is affected, so that:

- the information could be misleading to users who not aware of the existence and effect of the related party relationship; and
- it may not be possible to make meaningful comparisons between the subsidiary's financial statements and those of a similar entity that (for example) makes all its sales to third parties on normal commercial terms (at 'arm's length').

The **consolidated financial statements** are also affected. Because they present the activities of the group as a single entity, transactions between the subsidiary and the parent are eliminated (not included). Amounts owed by one entity to another are also eliminated.

1.5 International accounting standards and group accounts

There are three relevant IASs and IFRSs relating to the financial statements of groups of companies:

- IAS27: Consolidated and separate financial statements
- IAS28: Investments in associates
- IFRS3: Business combinations. (IFRS 3 was revised in January 2008 and applies to business combinations that occur in financial periods starting on or after 1 July 2009. However, the revised IFRS became examinable from December 2008.)

IFRS3 defines a business combination as 'a transaction ... in which an acquirer obtains control of one or more businesses.' The effect of business combinations is to bring together separate entities or businesses into one reporting entity, which produces consolidated financial statements for the group of entities as a whole.

1.6 The requirement to prepare consolidated accounts

IAS27 states that, with certain exceptions, a parent must present consolidated financial statements in which it consolidates its investments in subsidiaries. In other words, a parent must prepare consolidated financial statements for the group as a whole.

Exception to this rule

There is an exception to this rule. A parent need not present consolidated financial statements if (and only if) **all** the following conditions apply:

- The parent itself (X) is a wholly-owned subsidiary, with its own parent (Y). Alternatively, the parent (X) is a partially-owned subsidiary, with its own parent (Y), and the other owners of X are prepared to allow it to avoid preparing consolidated financial statements.
- The parent's debt or equity instruments are not traded in a public market.
- The parent does not file its financial statements with a securities commission for the purpose of issuing financial instruments in a public market.
- The parent's own parent, or the ultimate parent company (for example, the parent of the parent's parent), **does** produce consolidated financial statements for public use that comply with International Financial Reporting Standards.

1.7 The requirement to include all subsidiaries

Consolidated financial statements should include **all** the subsidiaries of the parent (IAS27).

There are several reasons why a parent may not wish to consolidate a particular subsidiary, for example:

- The subsidiary's activities are dissimilar from those of the parent, so that the consolidated financial statements might not present the group's financial performance and position fairly.
- The subsidiary has been acquired only so that it can be resold within a short time.
- Obtaining the information needed would be expensive and time consuming and might delay the preparation of the consolidated financial statements.
- The subsidiary operates under severe long term restrictions, so that the parent is unable to manage it properly. For example, a subsidiary might be located in a country badly disrupted by a war or a revolution.

None of these is allowed as a reason for excluding a subsidiary from consolidation. However:

- Where a subsidiary is acquired exclusively with a view to subsequent resale, it is accounted for in accordance with IFRS 5 Non-current assets held for sale and discontinued operations.
- If a parent actually loses control over an entity which has been a subsidiary, it is no longer a subsidiary, even if the parent still holds more than 50% of its equity

shares. This means that it does not have to be 'consolidated' (i.e. included within the consolidated financial statements).

1.8 Common reporting date

Consolidated accounts combine the assets, liabilities, income and expenses of all the entities in the group.

IAS27 therefore requires that the financial statements of the parent and its subsidiaries that are used to prepare the consolidated financial statements should all be prepared with the same reporting date (the same financial year-end date), unless it is impracticable to do so.

If it is impracticable for a subsidiary to prepare its financial statements with the same reporting date as its parent, adjustments must be made for the effects of significant transactions or events that occur between the dates of the subsidiary's and the parent's financial statements. In addition, the reporting date of the parent and the subsidiary must not differ by more than three months.

1.9 Uniform accounting policies

Since the consolidated accounts combine the assets, liabilities, income and expenses of all the entities in the group, it is important that the methods used for recognition and measurement of all these items should be the same for all the entities in the group.

IAS27 therefore states that consolidated financial statements must be prepared using uniform accounting policies. The policies used to prepare the financial statements in all the entities in the group must be the same.

Consolidated statement of financial position: the basic rules

- The basic rules
- Acquiring a subsidiary after incorporation: pre- and post-acquisition profits
- Directly-related acquisition costs

2 Consolidated statement of financial position: the basic rules

2.1 The basic rules

A consolidated statement of financial position brings together the assets and liabilities of the parent company and all its subsidiaries. Some adjustments are made to the assets and liabilities for the purpose of consolidation, but the assets of the group minus its liabilities are the group's equity.

The basic rules for preparing a consolidated statement of financial position can be illustrated with a simple example. In this example:

- the parent owns 100% of the equity of the subsidiary
- the parent acquired its investment in the subsidiary when the subsidiary was first established (so the acquisition date was the date that the subsidiary was created)
- the cost of the investment in the subsidiary is exactly equal to the fair value of the net assets in the subsidiary, as at the date of acquisition.

When all these conditions apply, a consolidated statement of financial position can be prepared as at the acquisition date of the subsidiary by:

- adding the assets of the parent and the subsidiary, line by line
- however, excluding the item 'investment in subsidiary' in the statement of financial position of the parent company
- adding the liabilities of the parent and the subsidiary, line by line.

The equity and reserves in the consolidated statement of financial position consist of:

- the equity and reserves of the parent, and
- only the reserves of the subsidiary that have been earned since its acquisition. As at the date of acquisition, these are zero.



Example

A parent entity P acquired 100% of the equity shares of a subsidiary entity S when the subsidiary was first established. The net assets of S when it was first set up (total assets minus total liabilities) were valued at \$120,000 and P paid \$120,000 to acquire these net assets.

The summary statements of financial position of both entities when S was established and P acquired 100% ownership were as follows.

	Parent P	Subsidiary S
	\$	\$
Non-current assets:		
Property, plant and equipment	640,000	125,000
Investment in S	120,000	-
	<u>760,000</u>	<u>125,000</u>
Current assets	140,000	20,000
	<u>900,000</u>	<u>145,000</u>
Equity		
Equity shares of \$1 each	200,000	80,000
Share premium	250,000	40,000
Retained earnings	350,000	-
	<u>800,000</u>	<u>120,000</u>
Current liabilities	100,000	25,000
	<u>900,000</u>	<u>145,000</u>

A consolidated statement of financial position as at the date of incorporation can be prepared as follows:

P Group: consolidated statement of financial position as at the date of acquiring S

Non-current assets:		\$
Property, plant and equipment	(640,000 + 125,000)	765,000
Current assets	(140,000 + 20,000)	<u>160,000</u>
		<u>925,000</u>
Equity		
Ordinary shares of \$1 each	(parent company only)	200,000
Share premium	(parent company only)	250,000
Retained earnings		<u>350,000</u>
		<u>800,000</u>
Bank loans	(100,000 + 25,000)	<u>125,000</u>
		<u>925,000</u>

Note: In practice, there is no reason to prepare a consolidated statement of financial position when a subsidiary is acquired. However, it is used here to illustrate the basic principles of consolidation, before going on to consider what happens after the subsidiary has been acquired.

2.2 Acquiring a subsidiary after incorporation: pre- and post-acquisition profits

Subsidiaries are often acquired after they have been incorporated or established, and after they have been in business for some time. The acquired subsidiary will have some accumulated profits (retained earnings) at the date of the acquisition. These are called 'pre-acquisition profits'.

Pre-acquisition profits of a subsidiary are not included as retained earnings in the consolidated financial statements – they are dealt with as part of the purchased goodwill calculation (see below).

However, **post-acquisition profits** of a subsidiary **are** included in group profits in the consolidated statement of comprehensive income, as a part of the profits of the entire group. They are also included in the retained earnings of the group, and so are included in the consolidated statement of financial position.



Example

A parent P acquired 100% of the share capital of subsidiary S on 1 January Year 3.

The net assets of S (total assets minus total liabilities) were valued at \$200,000 at the date of acquisition and P paid \$200,000 to acquire the shares in S.

(**Note:** This means that there is no purchased goodwill. Goodwill is explained later).

The summary statements of financial position of both entities at 1 January Year 3 and at 31 December Year 3 are as follows.

	At the acquisition date 1 January Year 3		At the end of the year 31 December Year 3	
	\$	\$	\$	\$
Non-current assets:				
Property, plant and equipment	670,000	170,000	680,000	245,000
Investment in S	200,000	-	200,000	-
	<u>870,000</u>	<u>170,000</u>	<u>880,000</u>	<u>245,000</u>
Current assets	110,000	80,000	175,000	90,000
	<u>980,000</u>	<u>250,000</u>	<u>1,055,000</u>	<u>335,000</u>
Equity				
Equity shares	150,000	30,000	150,000	30,000
Share premium	280,000	90,000	280,000	90,000
Retained earnings	380,000	80,000	470,000	140,000
	<u>810,000</u>	<u>200,000</u>	<u>900,000</u>	<u>260,000</u>
Current liabilities	170,000	50,000	155,000	75,000
	<u>980,000</u>	<u>250,000</u>	<u>1,055,000</u>	<u>335,000</u>

During the year to 31 December Year 3, entity P made a profit after tax of \$90,000 and entity S made a profit after tax of \$60,000. Neither entity paid any dividend.

The **consolidated profit for the year** is \$90,000 + \$60,000 = \$150,000, because all the profits of S are post-acquisition profits. (S was acquired on 1 January).

The **consolidated statement of financial position at the date of the acquisition of S**, at 1 January Year 3, is as follows. Note that none of the pre-acquisition retained earnings of S are included in the consolidated statement of financial position.

P Group

Consolidated statement of financial position at the date of acquisition of S
1 January Year 3

		\$
Non-current assets:		
Property, plant and equipment	(670,000 + 170,000)	840,000
Current assets	(110,000 + 80,000)	190,000
		<u>1,030,000</u>
Equity		
Equity shares	(parent company only)	150,000
Share premium	(parent company only)	280,000
Consolidated retained earnings	(parent company only)	380,000
		<u>810,000</u>
Current liabilities	(170,000 + 50,000)	220,000
		<u>1,030,000</u>

The **consolidated statement of financial position at 31 December Year 3** is as follows. Note that consolidated retained earnings of the group include both the profits of the parent P and the post-acquisition profits of the subsidiary S. The post-acquisition profit of S is its profit in the whole of Year 3, \$60,000 – since it was acquired on 1 January.

P Group

Consolidated statement of financial position at 31 December Year 3

		\$
Non-current assets:		
Property, plant and equipment	(680,000 + 245,000)	925,000
Current assets	(175,000 + 90,000)	265,000
		<u>1,190,000</u>
Equity		
Equity shares	(parent company only)	150,000
Share premium	(parent company only)	280,000
Consolidated retained earnings	In \$000: (470 + 60)	530,000
		<u>960,000</u>
Current liabilities	(155,000 + 75,000)	230,000
		<u>1,190,000</u>

Other reserves

Sometimes a subsidiary has reserves other than retained earnings. The same basic rules apply.

If a reserve existed in the acquired subsidiary at the acquisition date, it is included in the goodwill calculation and treated in the same way as pre-acquisition profits.

If a reserve arose after the acquisition date, it is treated in the same way as post-acquisition profits.

2.3 Directly-related acquisition costs

When a company acquires shares in a new subsidiary, the main cost of the acquisition is the purchase price paid for the shares, to buy them from the existing shareholders.

In addition, the acquiring company will incur some expenses that are directly related to the acquisition, such as the costs of professional advisers, including legal fees and accounting fees.

These directly-related acquisition costs or expenses must be written off to profit and loss as an expense in the year of acquisition.

This will be explained in more detail in the section on purchased goodwill.

Consolidated statement of financial position: purchased goodwill

- The nature of purchased goodwill
- The cost of acquisition and directly-related acquisition costs
- Goodwill and mid-year acquisition
- Acquired intangible assets

3 Consolidated balance sheet: purchased goodwill

3.1 The nature of purchased goodwill

When a parent company acquires a subsidiary company, the price it pays is normally more than the fair value of the net assets of the subsidiary. This is because the market value of a company is normally more than the value of its net assets.

The difference between the fair value of the purchase price paid and the fair value of the net assets acquired is purchased goodwill (usually called simply 'goodwill').

	\$
Cost of the acquisition	A
Fair value of net assets acquired	B
Goodwill	<u>A – B</u>

Purchased goodwill is included in the consolidated statement of financial position, as an intangible asset. (In this respect, purchased goodwill differs from internally-generated goodwill, which is not included in financial statements.)

An important point to note is that the **initial cost of goodwill** is measured at the **date of acquisition** of the subsidiary.

3.2 The cost of acquisition and directly-related acquisition costs

Purchased goodwill is the difference between the cost of acquisition of a subsidiary and the fair value of the net assets acquired.

It was stated in the previous section that in any acquisition there will be some costs directly related to the acquisition, such as advisers' fees. Until IFRS 3 was revised from 2008, it was the accepted practice to include these directly-related costs in the cost of acquisition: this meant that the costs were included in the calculation of purchased goodwill.

With the revision of IFRS 3, this is no longer permitted.

- Costs directly related to the acquisition should not be included in the costs of the acquisition. Instead, they are treated as an expense and written off against retained profits in full in the year of acquisition.

- Purchased goodwill therefore excludes these directly-attributable costs of acquisition.



Example

A parent P acquired 100% of the share capital of entity S on 1 January Year 3. P paid \$230,000 to acquire the shares in S. The summary statements of financial position of both companies at 31 December Year 3 are as follows.

	Summary statements of financial position at 31 December Year 3	
	P	S
	\$	\$
Assets:		
Investment in S, at cost	230,000	-
Other assets	570,000	240,000
	<u>800,000</u>	<u>240,000</u>
Equity		
Equity shares	200,000	50,000
Share premium	100,000	20,000
Retained earnings at 1 January Year 3	400,000	100,000
Retained profit for year to 31 December Year 3	40,000	25,000
	<u>740,000</u>	<u>195,000</u>
Current liabilities	60,000	45,000
	<u>800,000</u>	<u>240,000</u>

At the date of acquisition, the fair value of the net assets of S were \$170,000.

Expenses directly related to the acquisition were \$75,000 but these have not been included in the figures above for P. There has been no impairment of goodwill during Year 3.

A consolidated statement of financial position as at 31 December Year 3 is prepared as follows.

Workings

Purchased goodwill = \$230,000 - \$170,000 = \$60,000.

Directly-attributable expenses of the acquisition are \$75,000. Since these have not yet been accounted for, they should reduce the net assets of P by \$75,000 and also reduce its retained profits by the same amount.

P Group	
Consolidated statement of financial position as at 31 December Year 3	
	\$ \$
Assets:	
Goodwill (see working)	60,000
Other assets (570 + 240 – 75 expenses of acquisition)	<u>735,000</u>
Total assets	<u>795,000</u>
Equity	
Equity shares (P only)	200,000
Share premium (P only)	100,000
Retained earnings of P at 31 December Year 3	440,000
Less: Directly attributable acquisition costs	(75,000)
S: post-acquisition profits	<u>25,000</u>
	<u>390,000</u>
	690,000
Current liabilities (60 + 40)	<u>105,000</u>
Total equity and liabilities	<u>795,000</u>

Note: negative goodwill and bargain purchases

In very unusual circumstances, goodwill might be 'negative'. This will happen if the price paid to acquire the shares in a subsidiary is less than the fair value of the net assets acquired.

IFRS3 does not use the term 'negative goodwill': instead it refers to 'bargain purchases'. However 'negative goodwill' is a convenient way of expressing the financial effect when the acquisition cost is less than the fair value of the net assets acquired.

When a bargain purchase occurs, the 'negative goodwill' should be added to the consolidated profit for the group for the year. There will be no goodwill in the consolidated statement of financial position.

Before it is concluded that there has been a bargain purchase and that negative goodwill has arisen, the acquirer should reassess the measurement of the subsidiary's identifiable assets, liabilities, and contingent liabilities, and possibly also the cost of the acquisition. Only the excess remaining after this re-assessment has been made should be treated as negative goodwill and added to the group's consolidated profit for the year.

3.3 Goodwill and mid-year acquisition

Acquisitions do not usually occur conveniently at the end of the financial year. When an acquisition occurs during the financial year, it may be necessary to identify the subsidiary's statement of financial position at the acquisition date. The problems are:

- to decide the fair value of the subsidiary's net assets at the acquisition date
- to divide the subsidiary's profit in the year of acquisition between profits that are pre-acquisition and profits that are post-acquisition.

The first consolidated statement of financial position with the new subsidiary will not be prepared until the end of the financial year. There is no reason to prepare a consolidated statement of financial position at the date of acquisition of the subsidiary. Dividing the subsidiary's profits for the year between pre-acquisition and post-acquisition is therefore done retrospectively at the end of the year, on a 'fair basis' of allocation of total profit for the year between pre- and post-acquisition.



Example

Parent entity P acquired 100% of the equity of entity S on 1 May Year 2 at a cost of \$500,000. The statement of financial position of Entity S, which did not pay any dividend during the year, was as follows at the beginning and at the end of Year 2. The values of the assets and liabilities shown in the statement of financial position of Entity S are assumed to represent fair values.

	Entity S	
	At 1 January	At 31 December
	\$	\$
Non-current assets:		
Property, plant and equipment	370,000	400,000
Current assets	100,000	145,000
	<u>470,000</u>	<u>545,000</u>
Equity		
Equity shares	100,000	100,000
Share premium	50,000	50,000
Retained earnings	<u>300,000</u>	<u>360,000</u>
	450,000	510,000
Current liabilities	<u>20,000</u>	<u>35,000</u>
	<u>470,000</u>	<u>545,000</u>

The net assets on 1 January were \$450,000 (= \$470,000 – \$20,000) and on 31 December net assets were \$510,000 (= \$545,000 – \$35,000). Since there has been no dividend payment, the profit of S for the year was therefore the increase in its retained earnings reserve during the year. This was \$60,000 (= \$360,000 – \$300,000).

It could be assumed that profits accumulate at an even rate during the year, so that at the acquisition date on 1 May, the profits of S for the year were \$20,000 (= \$60,000 × 4/12). These are pre-acquisition profits.

The post-acquisition profits of Entity S are \$40,000 (= \$60,000 × 8/12).

Goodwill could therefore be calculated as follows:

	\$
Net asset of subsidiary at 1 January	450,000
Profit for the 4 months to 1 May	20,000
Net assets of S at 1 May	470,000
Cost of acquisition	500,000
Goodwill	30,000

3.4 Acquired intangible assets

When a company acquires a subsidiary, it may identify certain specific intangible assets of the subsidiary that it has acquired, which are not included in the subsidiary's statement of financial position. These might be 'market-related', 'customer-related', 'artistic-related' or 'technology-related' intangible assets.

If these assets are separately identifiable and can be measured reliably, they should be included in the consolidated statement of financial position as intangible assets, and accounted for as such. (They should be amortised and might also be subject to impairment.)

Purchased goodwill is the difference between the acquisition price and the fair value of all the identifiable net assets of the subsidiary, including the intangible or intangibles.



Example

Parent entity P acquired 100% of the equity of entity S on 14 July Year 6 at a price of \$9 million. The fair value of the net assets of S at this date was \$6.5 million, but in addition P recognises a market-related intangible asset of S which it values at \$900,000.

This intangible asset should be included in the consolidated statement of financial position, initially at cost but then at cost less accumulated amortisation and impairment.

The purchased goodwill on acquisition is calculated as follows:

	\$
Fair value of net assets acquired	6,500,000
Plus value of market-related intangible asset	900,000
	7,400,000
Cost of acquisition	9,000,000
Goodwill	1,600,000

Consolidated statement of financial position: non-controlling interests

- Definition of non-controlling interest (minority interest)
- Accounting for non-controlling interests (minority interests)
- Value of NCI by the fair value method: introduction

4 Consolidated statement of financial position: non-controlling interests

4.1 Definition of non-controlling interest (minority interest)

When a parent entity acquires less than 100% of the equity shares in a subsidiary, the remainder of the shares in the subsidiary are held by other shareholders. These are called the non-controlling interest or minority interest in the subsidiary. The abbreviation 'NCI' is used for non-controlling interests.

For example, P might acquire 60% of the shares in S.

- It has acquired 60% of the 'equity' ownership of S.
- The remaining 40% of the equity in S is owned by the non-controlling interest.

Non-controlling interest (NCI) is defined by IAS27 as: 'the equity in a subsidiary not attributable ... to a parent.'

4.2 Accounting for non-controlling interests (minority interests)

In principle, there are two ways that the non-controlling interest or minority interest could be accounted for in consolidated accounts:

- **Method 1.** The non-controlling interest could be excluded, and only the parent's share of the assets and liabilities of the subsidiary would be consolidated into the consolidated financial statements.
- **Method 2.** The total assets and liabilities of the entities in the group could be presented in the consolidated financial statements, including the share attributable to non-controlling interests.

Method 2 is used.

- The consolidated statement of financial position must present the assets, liabilities and equity of the group as a whole, including the non-controlling interest. The amount of non-controlling interest must then be presented in the consolidated statement of financial position as an item within equity. However, it must be shown separately from the equity attributable to the 'owners of the parent' (shareholders of the parent company).
- Similarly the consolidated statement of comprehensive income for the group must show the total profit for the group as a whole, with the share attributable

to the non-controlling interest is shown separately from the share attributable to the owners of the parent.

This presentation reflects the fact that although the parent does not actually **own** 100% of the assets and liabilities of the group, it **controls** 100% of these assets and liabilities.

NCI and goodwill

A problem with accounting for non-controlling interests is the treatment of goodwill.

- When a parent company acquires 100% of a subsidiary, it acquires 100% of the goodwill in the subsidiary, which is included in the consolidated statement of financial position as purchased goodwill.
- When a parent company acquires less than 100% of a subsidiary, there is presumably some goodwill in the subsidiary that is attributable to the non-controlling interests. However the value of this goodwill is likely to be less than the goodwill attributable to the parent company, not only because the NCI owns a smaller proportion of the shares but also because the value of goodwill is usually enhanced for the parent by having a controlling interest.

If there is some goodwill in the subsidiary that is attributable to the NCI, a question to resolve is whether this goodwill should be included in the consolidated statement of financial position.

IFRS 3 (revised) allows two methods of accounting for NCI:

- **Method 1.** Do not recognise any goodwill for the NCI in the consolidated statement of financial position. NCI should be valued at a proportionate share of the identifiable net assets of the subsidiary. For example if the NCI in a subsidiary is 30% and the identifiable net assets of the subsidiary are \$1,000,000, the NCI should be included in the consolidated statement of financial position at \$300,000.
- **Method 2.** Recognise the goodwill attributable to the NCI in the consolidated statement of financial position, as at the date of acquisition. This goodwill cannot subsequently be re-valued, unless there is impairment and the goodwill should then be written down in value. This method of accounting for NCI is called the 'fair value' method.

The 'fair value' method of accounting for NCI was introduced for the first time by IFRS 3 (revised). The valuation of NCI at a proportionate share of the identifiable net assets of the subsidiary is the 'traditional' method of accounting for NCI by companies that use IFRSs to prepare their financial statements. The exam syllabus requires knowledge of only the 'fair value' method

Consolidated statement of financial position: fair value adjustments

- Why fair values are used in consolidated financial statements
- Adjusting the assets and liabilities acquired
- Fair value method of accounting for NCI

5 Consolidated balance sheet: fair value adjustments

5.1 Why fair values are used in consolidated financial statements

Goodwill is recognised by the acquirer as an asset from the acquisition date.

It is initially measured as the difference between:

- the cost of the acquisition and
- the parent's share of the fair values of the subsidiary's identifiable assets and liabilities (including contingent liabilities).

An examination question might tell you to assume that the fair value of the assets and liabilities of the subsidiary at the acquisition date are represented by their values in the subsidiary's statement of financial position. However, if the values in the statement of financial position are not the fair values there must be adjustments to the assets and liabilities of the subsidiary, for the purpose of consolidation. These fair value adjustments must all be made before the value of the purchased goodwill is calculated.

There are two reasons for making fair value adjustments:

- Consolidated accounts are prepared from the viewpoint of the **group**. Therefore the subsidiary's assets and liabilities must be shown at their cost to the group, not their original cost to the subsidiary. The cost to the group is the amount that the parent paid for them: their fair value at the date of acquisition.
- As well as identifiable assets and liabilities, the parent acquires goodwill. The cost of goodwill is the difference between the cost of the acquisition and the assets and liabilities acquired. If the subsidiary's assets and liabilities are not measured at fair value, the cost of goodwill is incorrect.

5.2 Adjusting the assets and liabilities acquired

Fair value is the amount at which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

The identifiable assets, liabilities and contingent liabilities of a subsidiary may only be recognised if they satisfy the definitions of assets and liabilities. Recognition is therefore permitted if the following conditions are satisfied:

- For an asset other than an intangible asset, it is probable that any associated future economic benefits will flow to the acquirer, and its fair value can be measured reliably;

- For a liability other than a contingent liability, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and its fair value can be measured reliably;
- For an intangible asset or a contingent liability, its fair value can be measured reliably.

The table below shows how different types of asset and liability should be valued.

Item	Fair value
Marketable investments	Current market value
Non-marketable investments	Estimated values that take into consideration features such as: (a) price earnings ratios (b) dividend yield (c) expected growth rates of comparable investments
Trade and other receivables	Present values of the amounts to be received. This is normally the same as their carrying value (book value). Discounting is not usually required because amounts are expected to be received within a few months.
Inventories: Finished goods	Selling price less the sum of: (a) the costs of disposal, and (b) a reasonable profit allowance for the selling effort of the acquirer based on profit for similar finished goods.
Inventories: work in progress	Selling price of finished goods less the sum of: (a) costs to complete, (b) costs of disposal, and (c) a reasonable profit for the completing and selling effort based on profit for similar finished goods.
Inventories: raw materials	Current replacement costs
Land and buildings	Market value
Plant and equipment	Normally market value. Use depreciated replacement cost if market value cannot be used (e.g. because of the specialised nature of the plant and equipment or because the items are rarely sold, except as part of a continuing business).
Intangible assets	Use market value if available (should be by reference to an active market). Otherwise (if no active market exists) value on a basis that reflects the amount that the acquirer would have paid for the asset in an arm's length transaction between knowledgeable, willing parties based on the best information available.

Item	Fair value
Trade and other payables; long-term debt and other liabilities.	Present values of amounts to be disbursed in meeting the liability determined at appropriate current interest rates. For current liabilities this is normally the same as book value.
Contingent liabilities	The amounts that a third party would charge to assume those contingent liabilities.

The consolidated statement of financial position might include some assets and liabilities that would not normally be recognised in the financial statements or might not have been previously recognised in the subsidiary's financial statements.

Contingent liabilities of the subsidiary are recognised in the consolidated statement of financial position. They cannot be recognised in an entity's individual financial statements (IAS 37).

Restructuring costs

An acquirer should **not** recognise a liability for the cost of restructuring a subsidiary or for any other costs expected to be incurred as a result of the acquisition (including future losses).

This is because a plan to restructure a subsidiary after an acquisition cannot be a liability at the acquisition date. For there to be a liability (and for a provision to be recognised) there must have been an obligation to incur a future cost that was created or incurred in the past. This can only be the case if the subsidiary was already committed to the restructuring before the acquisition.

This means that the acquirer cannot recognise a provision and then subsequently release it to the consolidated profit in order to smooth profits or reduce losses after the acquisition. This form of creative accounting was common before the issue of IAS 37, but is no longer permitted.



Example

Entity P acquired 100% of the shares of Entity S on 1 May at a cost of \$700,000. The statements of financial position of the entities at the acquisition date were as follows.

	At the acquisition date	
	1 May	
	P	S
	\$	\$
Non-current assets:		
Property, plant and equipment	500,000	350,000
Investment in S	700,000	-
	<u>1,200,000</u>	<u>350,000</u>
Current assets		
Inventory	70,000	60,000
Other current assets	130,000	110,000
	<u>1,400,000</u>	<u>520,000</u>
Equity		
Ordinary shares	300,000	200,000
Share premium	200,000	100,000
Retained earnings	580,000	170,000
	<u>1,080,000</u>	<u>470,000</u>
Current liabilities	320,000	50,000
	<u>1,400,000</u>	<u>520,000</u>

The accounting policy of Entity P is to measure non-controlling interests at their proportionate share of the net assets of the subsidiary.

The fair value of the subsidiary's inventory at 1 May is estimated as \$52,000.

The fair value of the non-current assets of the subsidiary at 1 May is estimated as \$420,000.

The **goodwill** is calculated as follows:

	\$
Fair value of net assets:	
Non-current assets	420,000
Inventory	52,000
Other current assets	110,000
Liabilities	<u>(50,000)</u>
	532,000
Cost of the acquisition	<u>700,000</u>
Goodwill	<u>168,000</u>

A consolidated statement of financial position as at the date of acquisition will be as follows.

P Group**Consolidated statement of financial position as at the date of acquisition of S
1 May**

Non-current assets:		\$
Property, plant and equipment	(500,000 + 420,000)	920,000
Goodwill at cost		168,000
Current assets		
Inventory	(70,000 + 52,000)	122,000
Other current assets	(130,000 + 110,000)	240,000
		<u>1,450,000</u>
Equity		
Ordinary shares (P only)		300,000
Share premium (P only)		200,000
Consolidated retained earnings		<u>580,000</u>
		1,080,000
Current liabilities	(320,000 + 50,000)	<u>370,000</u>
		<u>1,450,000</u>

Note that the statement of financial position of the subsidiary S at the date of acquisition is adjusted as follows, for the purpose of consolidation:

S**Adjusted statement of financial position at 1 May**

	\$
Non-current assets:	
Property, plant and equipment	420,000
Current assets	
Inventory	52,000
Other current assets	<u>110,000</u>
	<u>582,000</u>
Equity	
Ordinary shares	200,000
Share premium	100,000
Revaluation reserve (420,000 – 350,000) – see Note 1	70,000
Retained earnings – see Note 2	<u>162,000</u>
	532,000
Current liabilities	<u>50,000</u>
	<u>582,000</u>

Notes

- (1) A revaluation reserve is created for the revaluation of the non-current assets. The retained earnings are adjusted downwards to allow for the downwards revaluation of the inventory by \$8,000.

- (2) The retained earnings of the subsidiary after the fair value adjustments are calculated as follows:

	\$
Retained earnings in the accounts of S as at the acquisition date	170,000
Minus downward adjustment to inventory valuation (60,000 – 52,000)	(8,000)
Adjusted retained earnings of subsidiary S	<u>162,000</u>

5.4 Fair value method of accounting for NCI

IFRS 3 (revised) allows an alternative method of measurement for non-controlling interests, which values the NCI at the date of acquisition at a fair value. This includes some goodwill in the subsidiary that is attributable to the NCI.

With this 'fair value' method, the preparation of the consolidated statement of financial position is similar to the method already described. The difference is that:

- Goodwill attributable to the NCI (asset) is included in goodwill in the consolidated statement of financial position
- NCI (equity) is increased by the amount of this goodwill.

By adding the goodwill attributable to the non-controlling interests to their proportionate share of the net assets of the subsidiary, the non-controlling interests are valued at their fair value as at the acquisition date.

IFRS 3 provides the following 'fair value' formula for the calculation of total goodwill in the consolidated statement of financial position as at the acquisition date:

	\$
Purchase consideration paid by the parent company	A
Fair value of NCI at acquisition date	B
	<u>A + B</u>
Identifiable net assets of the subsidiary at the acquisition date (at fair value)	(C)
Total goodwill (parent and NCI)	<u>A + B – C</u>

After the acquisition date, the fair value formula is no longer applied. NCI is valued in the consolidated statement of financial position at:

	\$
Proportionate share of identifiable net assets of subsidiary	X
Goodwill attributable to NCI (= goodwill as at acquisition date less any subsequent impairment)	Y
	<u>X – Y</u>



Example

Hedd acquired 80% of the shares of Stove on 1 May Year 2 at a price of \$8 per share. A summary statement of financial position of Stove at this date is as follows:

Stove		\$
Statement of financial position at 1 May Year 2		
Total assets	650,000	
Equity		
Ordinary shares of \$1 each	100,000	
Retained earnings	500,000	
	600,000	
Liabilities	50,000	
Equity plus liabilities	650,000	

It has been estimated that the goodwill attributable to the non-controlling interests in Stove at this date was \$45,000.

For the purpose of preparing a consolidated statement of financial position, goodwill and the non-controlling interests should be valued as follows.

- Net assets of subsidiary at acquisition date = $\$(650,000 - 50,000) = \$600,000$
- Fair value of parent company share = $80\% \times \$600,000 = \$480,000$
- Amount attributable to NCI = $20\% \times \$600,000 = \$120,000$
- Fair value of NCI at acquisition date = $\$120,000 + \text{attributable goodwill } \$45,000 = \$165,000$.

	\$
Purchase consideration paid by the parent company (80,000 shares $\times$ \$8)	640,000
Fair value of parent company share of net assets	480,000
Purchased goodwill attributable to parent	160,000
	\$
Purchased goodwill attributable to parent	160,000
Goodwill attributable to NCI	45,000
Total goodwill in consolidated statement of financial position	205,000

Alternatively, total goodwill could be calculated as follows:

	\$
Purchase consideration paid by the parent company	640,000
Fair value of NCI at acquisition date (120,000 + 45,000)	165,000
	805,000
Net assets of the subsidiary at the acquisition date (at fair value)	(600,000)
Total goodwill (parent and NCI)	205,000

At the acquisition date, the NCI is valued at \$165,000. Subsequently, the value of NCI in the consolidated statement of financial position should be the proportionate share of the NCI in the net assets of the subsidiary, plus the goodwill of \$45,000 less any accumulated impairment of this goodwill.

How is the goodwill attributable to NCI calculated?

For the purpose of your examination, if you are asked to prepare a consolidated statement of financial position using the fair value method for NCI, the goodwill attributable to the NCI will be identifiable in one of the following three ways.

- The exam question might state the value of the goodwill attributable to the NCI.
- The exam question might state that the fair value of the NCI at the acquisition date was \$X. The value of attributable goodwill can then be calculated as the difference between total fair value (\$X) and the proportionate share of the NCI in the net assets of the subsidiary at the acquisition date.
- The exam question might give the market value of the shares in the subsidiary before its acquisition. The fair value of the NCI can then be estimated as the number of shares held by the NCI multiplied by the pre-acquisition price per share. Having established the total fair value of the NCI, the attributable goodwill is calculated by subtracting the proportionate share of the NCI in the net assets of the subsidiary at the acquisition date (same as the method above).



Example

Stott has 1 million shares of \$1 each in issue. Hott acquired 75% of these shares at a price of \$10 per share. Prior to the acquisition, the shares of Stott had been trading in the stock market at \$9 per share. The fair value of the net assets of Stott at the acquisition date was \$8 million.

Total goodwill and the value of the NCI at the acquisition date can be calculated as follows:

	\$
Purchase consideration paid by the parent company (750,000 shares × \$10)	7,500,000
Fair value of parent company share of net assets (75% × \$8 million)	6,000,000
Purchased goodwill attributable to parent	<u>1,500,000</u>
	\$
Fair value of NCI at acquisition date (250,000 × \$9)	2,250,000
NCI share of net assets at this date (25% × \$8 million)	<u>2,000,000</u>
Purchased goodwill attributable to NCI	<u>250,000</u>
	\$
Purchased goodwill attributable to parent	1,500,000
Goodwill attributable to NCI	<u>250,000</u>
Total goodwill in consolidated statement of financial position	<u>1,750,000</u>

Alternatively, total goodwill could be calculated as follows:

	\$
Purchase consideration paid by the parent company	7,500,000
Fair value of NCI at acquisition date	<u>2,250,000</u>
	9,750,000
Net assets of the subsidiary at the acquisition date (at fair value)	<u>(8,000,000)</u>
Total goodwill (parent and NCI)	<u>1,750,000</u>

At the acquisition date, the NCI is valued at \$2,250,000, which includes goodwill of \$250,000.

As stated earlier, after the acquisition date, the fair value formula is no longer applied. The NCI of Stott will be valued in the consolidated statement of financial position at:

	\$
Proportionate share of identifiable net assets of subsidiary	X
Goodwill attributable to NCI as at acquisition date	250,000
Accumulated impairment of goodwill after that date	<u>Y</u>
	<u>X + 250,000 – Y</u>

Consolidated statement of comprehensive income

- IAS 1 requirement for a consolidated statement of comprehensive income
- Consolidated income statement: the basic rules
- Pre- and post-acquisition profits
- Non-controlling interest in the consolidated income statement

6 Consolidated statement of comprehensive income

6.1 IAS1 requirement for a consolidated statement of comprehensive income

IAS1 requires consolidated financial statements to include either:

- a single statement of comprehensive income, or
- two statements: (1) a consolidated income statement that reports the components of profit or loss, and (2) a consolidated statement of comprehensive income that begins with profit after tax and then shows the other components of comprehensive income.

This is the same requirement as for single entities.

In addition, in consolidated financial statements, there must also be disclosure of:

- (1) the profit or loss for the period attributable to:
 - owners of the parent company, and
 - non-controlling interests.
- (2) total comprehensive income for the period attributable to:
 - owners of the parent company, and
 - non-controlling interests.

When there are two separate statements, item (1) should be disclosed in the consolidated income statement and item (2) should be disclosed in the statement of comprehensive income.

The main problems with preparing a consolidated statement of comprehensive income relate to reporting profit or loss for the period, and this section therefore focuses on profit or loss items. For convenience, this will be referred to as the 'consolidated income statement'.

6.2 Consolidated income statement: the basic rules

A consolidated income statement brings together the sales revenue, income and expenses of the parent and the sales revenue, income and expenses of its subsidiaries.

The basic principle can be illustrated with a simple example. In the example below, the subsidiary is 100% owned by the parent, and the acquisition did not occur in the current year.



Example

Entity P owns 100% of the equity capital of Entity S, and has owned the shares for several years. In the year just ended, the income statement of each entity was as follows.

	Entity P	Entity S
	\$	\$
Revenue	500,000	250,000
Cost of sales	(200,000)	(80,000)
Gross profit	300,000	170,000
Other income	25,000	6,000
Distribution costs	(70,000)	(60,000)
Administrative expenses	(90,000)	(50,000)
Other expenses	(30,000)	(18,000)
Finance costs	(15,000)	(8,000)
Profit before tax	120,000	40,000
Income tax expense	(45,000)	(16,000)
Profit for the period	75,000	24,000

In this situation, the figures for the parent and subsidiary are added together to produce the consolidated income statement.

P Group

Consolidated income statement for the year

	\$
Revenue (500,000 + 250,000)	750,000
Cost of sales (200,000 + 80,000)	(280,000)
Gross profit	470,000
Other income (25,000 + 6,000)	31,000
Distribution costs (70,000 + 60,000)	(130,000)
Administrative expenses (90,000 + 50,000)	(140,000)
Other expenses (30,000 + 18,000)	(48,000)
Finance costs (15,000 + 8,000)	(23,000)
Profit before tax	160,000
Income tax expense (45,000 + 16,000)	(61,000)
Profit for the period	99,000

6.3 Pre- and post-acquisition profits

When a parent acquires a subsidiary **during** a financial year, the profits of the subsidiary have to be divided into pre-acquisition and post-acquisition profits.

- The pre-acquisition profit is used to calculate the goodwill.

- The post-acquisition profit (or loss) is included in the consolidated profit for the year.

Unless you are given information that suggests an alternative assumption is appropriate, you should assume that in the year of acquisition, the profits of the subsidiary occur at an even rate throughout the course of the year. The division of the annual profit of the subsidiary into pre-acquisition and post-acquisition elements can be done on a time basis.

e

Example

Entity P acquired 100% of the equity shares of Entity S at a cost of \$750,000 on 1 October Year 2, when the net assets of Entity S were \$600,000. Entity P prepares its financial statements to 31 December each year. The income statement for each entity for the year to 31 December Year 2 was as follows.

	Entity P	Entity S
	\$	\$
Revenue	400,000	260,000
Cost of sales	(200,000)	(60,000)
Gross profit	200,000	200,000
Other income	20,000	-
Distribution costs	(50,000)	(30,000)
Administrative expenses	(60,000)	(80,000)
Other expenses	(20,000)	(10,000)
Finance costs	(10,000)	(5,000)
Profit before tax	80,000	75,000
Income tax expense	(30,000)	(15,000)
Profit for the period	50,000	60,000

Required

Prepare a consolidated income statement for the year to 31 December Year 2, assuming there is no impairment of goodwill during the year.

a

Answer

The acquisition date was 1 October. This means that 9/12 or 75% of the subsidiary's profit for the year is pre-acquisition profit and 3/12 or 25% is post-acquisition profit.

The post-acquisition profit of the subsidiary for the year is therefore $3/12 \times \$60,000 = \$15,000$.

	Entity P	Entity S (25%)	Consolidated
	\$	\$	\$
Revenue	400,000	65,000	465,000
Cost of sales	(200,000)	(15,000)	(215,000)
Gross profit	200,000	50,000	250,000
Other income	20,000	-	20,000
Distribution costs	(50,000)	(7,500)	(57,500)

	Entity P	Entity S (25%)	Consolidated
	\$	\$	\$
Administrative expenses	(60,000)	(20,000)	(80,000)
Other expenses	(20,000)	(2,500)	(22,500)
Finance costs	(10,000)	(1,250)	(11,250)
Profit before tax	80,000	18,750	98,750
Income tax expense	(30,000)	(3,750)	(33,750)
Profit for the period	50,000	15,000	65,000

6.4 Non-controlling interest in the consolidated income statement

When there is a non-controlling interest (minority interest) in a subsidiary, the consolidated income statement should show:

- the post-acquisition profit for the year for the group as a whole, including all the post-acquisition profit of the subsidiary, and
- the amount of this total profit that is attributable to the parent's equity shareholders and the amount that is attributable to the non-controlling interest in the subsidiary.

For the purpose of preparing the **consolidated income statement**, **all the pre-acquisition profits of the subsidiary are excluded**. When the financial statements include a separate consolidated income statement, the final lines of the consolidated income statement should therefore be as follows:

Profit for the period	<u>X</u>
Attributable to:	
Owners of the parent	Y
Non-controlling interest	<u>Z</u>
	<u>Y + Z = X</u>



Example

Entity P acquired 300,000 shares in Entity S on 1 August Year 2. The total net assets of Entity S at 1 January Year 2 were \$1,310,000.

The statement of financial position of entity S at 31 December Year 2 was as follows:

Entity S

Statement of financial position as at 31 December Year 2

	\$000
Property, plant and machinery	1,200
Current assets	<u>550</u>
	<u>1,750</u>
Equity and liabilities	
Equity shares of \$1 each	500
Share premium	300

Entity S
Statement of financial position as at 31 December Year 2

	\$000
Retained earnings	<u>600</u>
	1,400
Liabilities	<u>350</u>
	<u>1,750</u>

There has been no dividend payment by S in the year. The profit after tax of Entity P for the year was \$250,000. There has been no impairment of goodwill.

Required

Calculate the consolidated profit for the year to 31 December Year 2, and the allocation of this profit between the equity holders of the parent and the non-controlling interest in S.

a

Answer

Step 1. Establish the percentage share in the subsidiary of the parent P and the non-controlling interest.

	%
Parent share: $(300,000/500,000) \times 100\%$	60
Non-controlling interest: $(200,000/500,000) \times 100\%$	<u>40</u>
	<u>100</u>

Step 2. Establish the post-acquisition profit of the subsidiary.

Since there has been no dividend payment, the annual profit for the subsidiary can be calculated as the difference between the net assets of Entity S at the end of the year and the net assets at the beginning of the year.

	\$
Net assets of subsidiary at 31 December Year 2 ($1,750 - 350$)	1,400,000
Net assets of subsidiary at 1 January Year 2	<u>1,310,000</u>
Profit for the year after tax	<u>90,000</u>
Post-acquisition profit (5 months, therefore $5/12 \times \$90,000$)	37,500

Step 3. Allocate the subsidiary's post-acquisition profit between the parent's equity shareholders and the non-controlling interest in Entity S.

	\$
Post-acquisition profit (5 months, therefore $5/12 \times \$90,000$)	<u>37,500</u>
Parent P share: $60\% \times \$37,500$	22,500
Non-controlling interest: $40\% \times \$37,500$	15,000

Step 4. Calculate the profit for the year for the group as a whole, and separate into the parent's share and the non-controlling interest.

	\$
Profit for the year of Entity P	250,000
Post-acquisition profit of subsidiary S	37,500
Consolidated profit for the year	<u>287,500</u>
Attributable to:	
Owners of the parent (250,000 + 22,500)	272,500
Non-controlling interest	<u>15,000</u>
	<u>287,500</u>

Intra-group transactions

- Types of intra-group transaction
- The need to eliminate intra-group transactions on consolidation
- Intra-group sales
- Intra-group balances
- Unrealised profit in inventory

7 Intra-group transactions

7.1 Types of intra-group transaction

In many groups, business and financial transactions take place between entities within the group. These 'intra-group' transactions might be:

- the sale of goods or services between the parent and a subsidiary, or between two subsidiaries in the group
- transfers of non-current assets between the parent and a subsidiary, or between two subsidiaries in the group
- the payment of dividends by a subsidiary to the parent (or by one subsidiary to another subsidiary)
- loans by one entity in the group to another, and the payment of interest on intra-group loans.

7.2 The need to eliminate intra-group transactions on consolidation

Intra-group transactions should be eliminated on consolidation. In other words, the effects of intra-group transactions must be removed from the financial statements on consolidation.

The purpose of consolidated accounts is to show the financial position and the financial performance of the group as a whole, as if it is a single operating unit. If intra-group transactions are included in the consolidated financial statements, the statements will show too many assets, liabilities, income and expenses for the group as a single operating unit.

IAS27 therefore states:

- Intra-group balances and transactions, including income, expenses and dividends, must be eliminated in full.
- Profits or losses resulting from intra-group transactions that are recognised in inventory or non-current assets must be eliminated in full.



Example

Suppose that a parent P lends \$50,000 to its subsidiary S.

- In the statement of financial position of P, there will be a non-current asset of \$50,000.
- In the statement of financial position of the subsidiary S, there will be a long-term liability of \$50,000 for the loan.

If the consolidated statement of financial position is prepared by adding all the assets of the group and all the liabilities of the group, the total assets will include the \$50,000 loan (of P) and the total liabilities will also include the \$50,000 loan (of S).

However, looking at the group as a whole, the loan is an internal loan that does not affect the assets of the group of companies as a unit. The consolidated statement of financial position should therefore exclude the \$50,000 from both assets and liabilities.

Adjustments should be made for several types of intra-group transaction:

- to eliminate any element of double-counting, and also
- to eliminate any credit for profit (on intra-group sales) that has not yet been earned

7.3 Intra-group sales

The consolidated statement of comprehensive income shows the total sales and the total cost of sales for the group as a whole during a financial period.

If entities within the same group sell goods or services to each other, these intra-group transactions will be included:

- in the revenue of the entity making the sale
- as a cost of sale of the entity making the purchase.

Looking at the group as a single operating unit, however, there has been no sale and no purchase. The intra-group sale, for the group as a unit, is simply a transfer of goods or services within the group.

The revenue from intra-group sales and the cost of intra-group purchases must therefore be eliminated from the consolidated profit or loss for the year.

No inventories of intra-group sales items

Provided that the items sold and bought internally have been used to make a sale outside the group, so that there are no inventories of intra-group sales items, the adjustment is made **in consolidated profit or loss** by:

- deducting the revenue from intra-group sales from the total revenue for the group, and
- deducting the **same amount** from the cost of sales.



Example

A parent company and its subsidiary had the following revenue and cost of sales in the year just ended. The parent has owned the subsidiary for several years.

	Parent P	Subsidiary S
	\$000	\$000
Revenue	500	300
Cost of sales	<u>200</u>	<u>200</u>
Gross profit	<u>300</u>	<u>100</u>

Included in these figures are sales of \$50,000 by subsidiary S to parent P. The cost of these sales for subsidiary P was \$30,000. P has used all the items bought from S to make sales outside the group.

The revenue of subsidiary S includes \$50,000 of sales within the group to P. The cost of sales of P includes \$50,000 for the items bought from S. The total profit of the group is unaffected, but the double-counting in revenue and the cost of sales must be eliminated.

The figures for the consolidated statement of comprehensive income are calculated as follows

	Parent P	Subsidiary S	Adjust for intra-group sales	Consolidated profit
	\$000	\$000	\$000	\$000
Revenue	500	300	- 50	750
Cost of sales	<u>200</u>	<u>200</u>	<u>- 50</u>	<u>350</u>
Gross profit	<u>300</u>	<u>100</u>	<u>no change</u>	<u>400</u>

The gross profit of the group is unaffected, because all the intra-group items have been sold outside the group. However the group revenue and the group cost of sales must exclude the intra-group transactions.

When there are inventories of intra-group sales items

A different situation arises when, at the end of the financial year, some intra-group sales items are still held as inventory by the group entity that bought them. This is because the inventory includes some '**unrealised profit**'. This problem is explained later.

7.4 Intra-group balances

When entities within a group sell goods to other entities in the same group, the terms of trading are normally similar to those for sales to external customers. The selling group company will expect payment in cash for the goods sold, but will give credit terms to the buying group company.

When this happens, group entities will include other group entities within their trade receivables (for intra-group sales) and trade payables (for intra-group purchases).

The trade receivables of the selling group entity should equal the trade payables of the buying group entity. These 'intra-group balances' or 'inter-entity balances' must be eliminated on consolidation and excluded from the consolidated statement of financial position.

For example, if subsidiary S sells goods to parent P for \$6,000 and P has not paid for the goods as at the end of the financial year, the statement of financial position of parent P will have a payable for \$6,000 and subsidiary S will have a trade receivable for \$6,000. These intra-group balances should be eliminated, and neither of them should appear in the consolidated statement of financial position.



Example

The statements of financial position of Entity P and Entity S at 31 December Year 2 are as follows. Entity P owns 90% of the shares of Entity S.

	Parent P	Subsidiary S
Assets	\$	\$
Property, plant and equipment	400,000	250,000
Investment in S	200,000	-
Current assets		
Receivables balance from S	25,000	-
Other current assets	<u>125,000</u>	<u>200,000</u>
Total assets	<u>750,000</u>	<u>450,000</u>
Equity and liabilities		
Share capital: equity shares of \$1 each	100,000	50,000
Retained earnings	<u>600,000</u>	<u>300,000</u>
	700,000	350,000
Liabilities		
Payables balance with P	-	25,000
Other liabilities	<u>50,000</u>	<u>75,000</u>
Total equity and liabilities	<u>750,000</u>	<u>450,000</u>

The shares in subsidiary S were acquired when the net assets of S were \$150,000 (represented by share capital of \$50,000 and retained earnings of \$100,000).

The accounting policy of Entity P is to value non-controlling interests in S at a proportionate amount of the net identifiable assets of the subsidiary. There has been no impairment in goodwill since acquisition.

The parent and subsidiary trade with each other: the parent sells goods to the subsidiary. At the end of the reporting period (31 December Year 2), the subsidiary owed \$25,000 to the parent.

However, the subsidiary held no inventory of items bought from the parent.

Required: Prepare a consolidated statement of financial position.

a

Answer

	\$
Net assets in S acquired (= 90% × \$150,000)	135,000
Cost of the investment in S	200,000
Purchased goodwill	<u>65,000</u>

	\$
Retained earnings of S at 31 December Year 2	300,000
Pre-acquisition retained earnings of S	100,000
Retained post-acquisition profits of S	<u>200,000</u>
Parent's share of retained post-acquisition profits of S (90%)	\$180,000

The receivable of \$25,000 from S in the statement of financial position of P is the payable of \$25,000 in the statement of financial position of S. These items should be cancelled out, and must not appear in the consolidated statement of financial position.

The non-controlling interest in S should be calculated as a percentage of the net assets of S, including the debt payable to P.

Non-controlling interests	\$
Total assets of S	450,000
Liabilities of S (25,000 + 75,000)	<u>(100,000)</u>
Net assets of S at 31 December Year 2**	<u>350,000</u>
(** = share capital plus reserves)	
Non-controlling interests (10%)	<u>\$35,000</u>

The consolidated statement of financial position can now be prepared.

P Group

Consolidated statement of financial position at 31 December Year 2

	\$
Assets	
Property, plant and equipment (400,000 + 250,000)	650,000
Goodwill	65,000
Current assets (125,000 + 200,000)	<u>325,000</u>
Total assets	<u>1,040,000</u>

Equity and liabilities	
Equity attributable to owners of the parent	
Share capital: equity shares \$1	100,000
Retained earnings (600,000 + 180,000)	780,000
	880,000
Non-controlling interests	35,000
Total equity	915,000
Liabilities (50,000 + 75,000)	125,000
Total equity and liabilities	1,040,000

7.5 Unrealised profit in inventory

When entities within a group trade with each other, the selling entity makes a profit on the goods that it sells. Provided that all the goods are eventually sold outside the group, the internal profit does not matter for consolidation, because the revenue of the selling entity is a cost of sale for the buying entity. The matching revenue and cost of sale are both deducted from consolidated revenue and cost of goods sold, as described earlier, and the gross profit on consolidation is not affected.

A different situation arises, however, when some of the inventory sold by one group entity to another group entity is still held as inventory by the buying entity at the end of the reporting period.

When intra-group sales are still held as inventory:

- the entity that made the sale has recorded a profit on the sale, but
- this profit is included within the inventory valuation of the entity that made the purchase, because inventory is valued at the purchase cost to the buying entity.

The inventory is still held within the group, so the group as a unit has not made an external sale. The profit made by the selling entity is included in the cost of the closing inventory of the buying entity. The profit on the sale of this inventory must be eliminated on consolidation. It is **unrealised profit**.

Unrealised profit: 100%-owned subsidiary

The following rules should be applied for a 100%-owned subsidiary.

Unrealised profit is eliminated from the **consolidated statement of financial position** by:

- reducing the consolidated retained earnings by the amount of the unrealised profit, and
- reducing the valuation of the inventory by the amount of the unrealised profit.

In the **consolidated statement of comprehensive income/income statement**:

- reduce consolidated **revenue** by the amount of the intra-group sales (= R)

- reduce the consolidated cost of goods sold by the intra group-sales (R) minus the amount of unrealised profit in the closing inventory (P).

	\$
Revenue from intra-group sales	R
Unrealised profit in closing inventory of intra-group sales	<u>P</u>
Reduction in consolidated cost of goods sold	<u>(R – P)</u>

This has the effect of reducing the consolidated profit for the year by the unrealised profit in the closing inventory. (This is because consolidated revenue is reduced by R and the cost of goods sold is reduced by a smaller amount, (R – P).)



Example

The revenue and cost of goods sold for a parent entity P and its 100%-owned subsidiary S are shown below, for the year to 31 December Year 6.

	P	S
	\$000	\$000
Revenue	750	500
Cost of goods sold	<u>300</u>	<u>200</u>
Gross profit	<u>450</u>	<u>300</u>

The subsidiary S made sales of \$100,000 to P during the year. Of these sales, \$30,000 is still held as inventory by P at the year-end. The mark-up on goods sold by S to P is 150% of cost.

Required

Calculate the revenue and cost of goods sold for the consolidated income statement.



Answer

The closing inventory of P that was purchased from S is carried in the accounts of P at \$30,000. However, the unrealised profit must be eliminated.

When unrealised profit is stated as a percentage mark-up on cost, it is calculated as:

$$\text{Unrealised profit} = \text{Sales value} \times \frac{\text{Mark - up \%}}{(\text{Mark - up \%} + 100\%)}$$

In this example, the unrealised profit in the inventory is:

$$\$30,000 \times \frac{150}{(150 + 100)} = \$18,000$$

Consolidated revenue is reduced by the total amount of intra-group sales, \$100,000.

The consolidated cost of goods sold is reduced by the total intra-group sales minus the unrealised profit in the inventory. It is therefore reduced by $\$100,000 - \$18,000 = \$82,000$.

P Group

Consolidated income statement for the year to 31 December Year 6

	\$000
Revenue (750 + 500 – 100)	1,150
Cost of goods sold (300 + 200 – 82)	418
Gross profit (450 + 300 – 18)	732

In the consolidated statement of financial position, the unrealised profit should be deducted from the inventory, and the inventory should be valued at \$12,000 (= \$30,000 – \$18,000).

Unrealised profit: partly-owned subsidiary

When there is unrealised profit in closing inventory within a group, and the inventory has been sold or purchased by a partly-owned subsidiary, **the entire unrealised profit should be eliminated from the inventory value.**

If the goods have been sold by the parent (P) to the subsidiary (S) then the profit has been made in P's books and the group consolidated retained profits are charged with the amount of the unrealised profit in the same way as when S is a wholly-owned subsidiary.

However if S is not a wholly-owned subsidiary, i.e. there is a non-controlling interest, and S has sold the goods to P then normal practice is to charge the **non-controlling interest** with its share of the unrealised profit.

Associates

Contents

- 1 Definition of associate
- 2 Accounting for investments in associates: equity method

Definition of associate

- The nature of the accounting problem
- Definition of an associate
- Method of accounting for associates

1 Definition of associate

1.1 The nature of the accounting problem

The previous chapters have explained the 'purchase method' of accounting for subsidiaries. The principle underlying the purchase method is that subsidiaries are under the **control** of the parent entity; therefore it is appropriate to present financial statements for the parent and its subsidiaries as if the group were a single operating entity.

The parent's share of the equity in the group and the non-controlling interest share (minority interest) of the equity are both included, but are shown separately.

Consolidation using the purchase method is not required where there is an investment in shares of another company, but the investment does not give control.

If an entity owns a **fairly small interest** in the equity shares of another company, and the investment is long-term:

- the shares are shown in the statement of financial position as a long-term assets (an investment) and valued in accordance with IAS39
- any dividends received for the shares are included in the income for the year as 'other income'.

Some investments in the equity shares of another company are **fairly substantial without giving control**. They are more than simple small investments, because the entity owning the shares has a reasonable degree of influence through the size of its shareholding. However, the investment does not give control; therefore it cannot be treated as a subsidiary.

These fairly substantial investments are accounted for as an investment in an associate. IAS28: **Investments in associates** deals with accounting for associates.

1.2 Definition of an associate

An associate is defined by IAS28 as: 'an entity... over which the investor has significant influence... that is neither a subsidiary nor an interest in a joint venture.'

Significant influence is defined as the power to participate in the financial and operating policy decisions of the entity, but is not control or joint control.

IAS28 states that if an entity holds 20% or more of the voting power (equity) of another entity, it is presumed that significant influence exists, and the investment should be treated as an associate.

If an entity owns less than 20% of the equity of another entity, the normal presumption is that significant influence does not exist.

Holding 20% to 50% of the equity of another entity therefore means as a general rule that significant influence exists, but not control; therefore the investment is treated as an associate, provided that it is not a joint venture.

The '**20% or more**' rule is a general guideline, however, and IAS28 states more specifically how significant influence arises. The existence of significant influence is usually evidenced in one or more of the following ways:

- representation on the board of directors
- participation in policy-making processes, including participation in decisions about distributions (dividends)
- material transactions between the two entities
- an interchange of management personnel between the two entities
- the provision of essential technical information by one entity to the other.

An entity loses significant influence when it loses the ability to participate in financial and operating policy decisions of the entity in which it has invested (the 'investee' entity). This might occur, for example, if the investee becomes subject to the control of a government, a court or a regulator.

1.3 Method of accounting for associates

IAS28 states that **associates** must be accounted for in consolidated financial statements using the **equity method of accounting**.

Accounting for investments in associates: equity method

- The nature of the accounting problem
- The main features of equity accounting

2 Accounting for investments in associates: equity method

2.1 Applying the equity method to account for associates

IAS28 states that an investment in an associate must be accounted for using the equity method of accounting. This rule applies whether or not the entity also has subsidiaries and prepares consolidated financial statements. An examination question might include an investment in an associate together with an investment in a subsidiary, with a requirement to prepare consolidated financial statements for the parent, subsidiary and associate combined. Consolidated financial statements should be prepared for the parent and subsidiary using the rules described in the previous chapters, and the associate should be included using the equity method of accounting.

The only exceptions to the requirement to use the equity method to account for investments in associates are:

- when the reporting entity presents separate financial statements in accordance with IAS27, or
- when the associate is acquired and held with a view to disposal within 12 months of acquisition, so that it is classified as 'held for sale' in accordance with IFRS5.

Differences in financial year-ends

IAS28 states that when the financial year of the reporting entity (the 'investor' entity) and the associate are different, the associate should prepare for the investor a set of financial statements with the same year end, unless it is impracticable to do so.

When different year-ends have to be used, the difference in the reporting date of the investor and the reporting date of the associate must be no more than three months. In addition, adjustments should be made for any significant transactions or events affecting the associate after the year-end of the investor but before its own year-end.

Uniform accounting policies

IAS28 also states that the financial statements of the investor entity and the associate should be prepared using uniform accounting policies for similar transactions. Where necessary, adjustments should be made to the financial statements of the associate so that they are the same as those of the reporting (investor) entity.

2.2 The main features of equity accounting

The main features of the equity accounting method are as follows.

Statement of financial position: investment in the associate

In the statement of financial position of the reporting entity (the investor), an investment in an associate is valued at:

- cost
- **plus** the investor's share of the retained post-acquisition profits of the associate (or minus the investor's share of any post-acquisition losses)
- **minus** any impairment in the value of the investment since acquisition.

There is no separately-recognised goodwill on acquisition of an investment in an associate. However, the investment in the associate should be subject to an annual impairment review in accordance with IAS36. Any impairment in the investment is deducted from the carrying value of the investment in the statement of financial position (and deducted from the reporting entity's retained earnings).

Statement of financial position: retained earnings

The retained earnings of the reporting entity, or the consolidated reserves when consolidated accounts are prepared, should include:

- the investor's share of the post-acquisition retained profits of the associate,
- **minus** any impairment in the value of the investment since acquisition.

Income statement

In the income statement (or the statement of comprehensive income, when a single statement is prepared), there should be a separate line for:

- 'Share of profits of associate'.



Example

Entity P acquired 40% of the equity shares in Entity A during Year 1 at a cost of \$128,000 when the fair value of the net assets of Entity A was \$250,000. Since that time, the investment in the associate has been impaired by \$8,000.

Since acquisition of the investment, there has been no change in the issued share capital of Entity A, nor in its share premium reserve or revaluation reserve. On 31 December Year 5, the net assets of Entity A were \$400,000.

In the year to 31 December Year 5, the profits of Entity A after tax were \$50,000.

Required

What figures would be included for the associate in the financial statements of Entity P for the year to 31 December Year 5?

a**Answer**

It is presumed that the investment in Entity A is an investment in an associate.

Retained post-acquisition profits of Entity A	\$
Net assets of the associate at 31 December Year 5	400,000
Net assets of Entity A at date of acquisition of shares	<u>(250,000)</u>
Retained post-acquisition profits of Entity A	<u>150,000</u>
The share 'owned' by Entity P is $40\% \times \$150,000$	= \$60,000

In the **statement of financial position**, the investment in the associate is as follows:

	\$
Investment at cost	128,000
Investor's share of post-acquisition profits of A	60,000
Minus: Accumulated impairment in the investment	<u>(8,000)</u>
Investment in the associate	<u>180,000</u>

Alternatively this figure for investment in the associate could be calculated as follows:

	\$
Share of net asset's of associate at the end of the reporting period ($40\% \times \$400,000$)	160,000
Goodwill not yet written off ($\$128,000 - (40\% \times \$250,000) - \$8,000$)	<u>20,000</u>
	<u>180,000</u>

The **retained earnings** in the statement of financial position will include:

	\$
Investor's share of post-acquisition profits of A	60,000
Minus: Accumulated impairment in the investment	<u>(8,000)</u>
	<u>52,000</u>

In the section of the statement of comprehensive income that reports the profit or loss for the period, the share of the associate's after-tax profit for the year is shown on a separate line:

- Share of profits of associate ($40\% \times \$50,000$): \$20,000.

The reasons for the use of the equity method

The equity method is used to represent the nature of the relationship between an investor and an associate.

The equity method reflects the investor's significant influence. This is less than control, but more than just the right to receive dividends that a simple investment would give.

Consolidated financial statements include 100% of a subsidiary's assets and liabilities, because these are controlled by the parent, even if the parent owns less than 100% of the equity shares. Consolidation would not be an appropriate way of accounting for an associate.

Under the equity method:

- the investor's **share** of the associate's assets, liabilities, profits and losses is included in the investor's financial statements; this represents significant influence
- the investor's share of the associate is shown on one line in the statement of comprehensive income (as an item of profit or loss) and the statement of financial position, making it clear that the associate is separate from the main group (a single economic entity).

Disadvantages of the equity method

The equity method has some important disadvantages for users of the financial statements.

Because only the investor's share of the net assets is shown, information about individual assets and liabilities can be hidden. For example, if an associate has significant borrowings or other liabilities, this is not obvious to a user of the investor's financial statements.

In the same way, the equity method does not provide any information about the components that make up an associates' profit for the period.

Interpretation of financial statements

Contents

- 1 Purpose of financial ratio analysis
- 2 Return on capital, profitability and asset turnover
- 3 Working capital efficiency ratios
- 4 Liquidity ratios
- 5 Position (debt) ratios
- 6 Limitations of interpretation techniques

Purpose of financial ratio analysis

- Obtaining information from the financial statements: financial ratios
- Using ratios: comparisons
- Categories of financial ratios
- Users of the financial statements and their information needs

1 Purpose of financial ratio analysis

A requirement of the examination is that you should be able to analyse the financial statements of either a single company or a group, calculate suitable financial ratios and comment on them. You will be required not only to calculate the ratios, but also to interpret them and suggest what they might indicate about the financial position and financial performance of the company or group.

1.1 Obtaining information from the financial statements: financial ratios

Financial statements are used to make decisions. They are used by shareholders and investors, and also by lenders, as well as by management. The financial statements contain a large number of figures, but the figures themselves do not necessarily have much meaning to a user of the financial statements. However, the figures can be analysed and interpreted by calculating financial ratios.

Financial ratios can help the user of the financial statements to assess the financial position of the entity, and its financial performance.

1.2 Using ratios: comparisons

Financial ratios can be used to make comparisons:

- Comparisons over a number of years. By looking at the ratios of a company over a number of years, it might be possible to detect improvements or a deterioration in the financial performance or financial position of the entity. Ratios can therefore be used to make comparisons over time, and to identify changes or trends
- Comparisons with the similar ratios of other, similar companies for the same period.
- In some cases, perhaps, comparisons with 'industry average' ratios.

1.3 Categories of financial ratios

The main financial ratios can be classified as:

- financial performance: return on capital, profitability and use of assets
- working capital 'turnover' ratios
- liquidity ratios
- position (debt) ratios

- investor ratios, however these are not part of the F3 exam syllabus

1.4 Users of the financial statements and their information needs

The IASB Framework identifies several groups of people who may use financial statements:

- investors and potential investors
- lenders
- employees
- suppliers
- customers
- government and government agencies
- the general public.

All these groups are interested in financial performance, financial position and cash flows, but some users are mainly interested in performance and profitability, while others may be more interested in liquidity and gearing or other matters.

For example:

- A private investor needs to know whether to continue to hold shares or to sell them. He or she will tend to be most interested in profitability ratios (such as gross and net profit margin and return on capital employed) and investor ratios (such as earnings per share, dividend cover and price earnings ratio).
- A potential acquirer needs information about an entity's profitability and probably also information about whether or not the entity is managed efficiently. The acquirer's management is likely to focus on profit margins, return on capital employed, asset turnover and working capital ratios.
- A bank that has been approached to lend money to an entity needs to know whether it will receive interest payments when these are due and whether the money that it lends will eventually be repaid. A bank manager will normally be most interested in cash flows and liquidity ratios (current ratio, acid test ratio) gearing and interest cover. A potential lender will also be interested in predicting future performance as without sales there will be no cash.

An examination question might ask you to interpret an entity's financial statements for the benefit of specific people or groups of people. Therefore your analysis should focus on the needs of the user. What do they need to know? What are they interested in? What decision do they need to make?

Return on capital, profitability and asset turnover

- Return on capital employed
- Return on shareholder capital
- Analysing return: profitability and asset utilisation
- Profit/sales ratio (and cost/sales ratios)
- Sales/capital employed ratio
- Percentage annual growth in sales

2 Return on capital, profitability and asset turnover

The aim of 'profitability ratios' is to assess the financial performance of a profit-making entity and the return that it makes on the capital invested.

2.1 Return on capital employed

Profit-making companies should try to make a profit that is large enough in relation to the amount of money or capital invested in the business. The most important profitability ratio is probably return on capital employed or ROCE.

For a single company:

$$\text{ROCE} = \frac{\text{Profit before interest and taxation}}{\text{Share capital and reserves} + \text{Long-term debt capital}} \times 100\%$$

The capital employed is the share capital and reserves, plus long-term debt capital such as bank loans, bonds and loan stock.

Where possible, use the average capital employed during the year. This is usually the average of the capital employed at the beginning of the year and end of the year.



Example

Sting Company achieved the following results in Year 1.

	1 January Year 1	31 December Year 1
	\$	\$
Share capital	200,000	200,000
Share premium	100,000	100,000
Retained earnings	500,000	600,000
Bank loans	200,000	500,000
	\$	
Profit before tax	210,000	
Income tax expense	65,000	
Profit after tax	145,000	

Interest charges on bank loans were \$30,000. Dividend payments to shareholders were \$45,000. Sales during the year were \$5,800,000.

Required

Calculate the return on capital employed for Year 1.



Answer

Capital employed at the beginning of the year = \$1,000,000.

Capital employed at the end of the year = \$1,400,000.

Average capital employed = $[\$1,000,000 + \$1,400,000] / 2 = \$1,200,000$.

Profit before interest and taxation = \$210,000 + \$30,000 = \$240,000.

$$\text{ROCE} = \frac{240,000}{1,200,000} \times 100\% = 20\%$$

This ROCE figure can be compared with the ROCE achieved by the company in previous years, and with the ROCE achieved by other companies, particularly competitors.

Groups of companies and ROCE

To calculate the ROCE for a group of companies, it is necessary to decide what to do with any non-controlling interest (minority interest). Since capital employed includes all the debt capital in the group, it makes sense to include the non-controlling interest (minority interest) in the capital employed.

ROCE should therefore be measured as profit before interest and tax as a proportion of total capital employed, **including the non-controlling interest (minority interest)**.

2.2 Return on shareholder capital

Return on shareholder capital (ROSC) measures the return on investment that the shareholders of the company have made. This ratio normally uses the values of the shareholders' investment as shown in the statement of financial position (rather than market values of the shares).

$$\text{ROSC} = \frac{\text{Profit after taxation}}{\text{Share capital and reserves}} \times 100\%$$

The average value of shareholder capital should be used if possible. This is the average of the shareholder capital at the beginning and the end of the year.

Profit after tax is used as the most suitable measure of return for the shareholders, since this is a measure of earnings (available for payment as dividends or for reinvestment in the business).



Example

Using the figures in the previous example:

Shareholders' capital at the beginning of the year = \$200,000 + \$100,000 + \$500,000
= \$800,000.

Shareholders' capital at the end of the year = \$200,000 + \$100,000 + \$600,000
= \$900,000.

Average shareholders' capital employed = $[\$800,000 + \$900,000] / 2 = \$850,000$.

$$\text{ROSC} = \frac{145,000}{850,000} \times 100\% = 17.06\%$$

Groups of companies and ROSC

When calculating the ROSC for a group of companies, the main focus of attention is normally the return on the investment of the shareholders in the parent company. The ROSC should therefore be calculated as:

$$\frac{\text{Profit after taxation and minority interest}}{\text{Equity attributable to equity holders of the parent company}} \times 100\%$$

The share capital and reserves should not include the non-controlling interest (minority interest) in the equity reserves.

2.3 Analysing return: profitability and asset utilisation

The size of the return on capital employed, or the size of the return on shareholders' capital, depends on two factors:

- the profitability of the goods or services that the entity has sold
- the volume of sales that the entity has achieved with the capital and assets it has employed: this is known as asset utilisation or asset turnover.

2.4 Profit/sales ratio (and cost/sales ratios)

The profit/sales ratio is the ratio of the profit that has been achieved for every \$1 of sales.

$$\text{Profit/sales ratio} = \frac{\text{Profit}}{\text{Sales}} \times 100\%$$

Profit/sales ratios are commonly used by management to assess financial performance, and a variety of different figures for profit might be used.

The definition of profit can be any of the following:

- Profit before interest and tax
- Gross profit (= Sales minus the Cost of sales) = '**gross profit ratio**'
- Net profit (= Profit after tax) = '**net profit ratio**'.

It is important to be consistent in the definition of profit, when comparing performance from one year to the next.

The gross profit ratio is often useful for comparisons between companies in the same industry, or for comparison with an industry average.

It is also useful to compare the net profit ratio with the gross profit ratio. A high gross profit ratio and a low net profit ratio indicate high overhead costs for administrative expenses and selling and distribution costs.



Example

Using the figures in the previous example, profit/sales ratios can be calculated as follows:

- If profit is defined as profit **before** interest and tax, the profit/sales ratio = $\$240,000 / \$5,800,000 = 0.0414 = 4.14\%$
- If profit is defined as profit **after** interest and tax, the profit/sales ratio = $\$145,000 / \$5,800,000 = 0.025 = 2.5\%$

It is also useful to monitor the ratio of costs to sales:

- Ratio of (Cost of sales/Sales) $\times 100\%$
- Ratio of (Administration costs/Sales) $\times 100\%$
- Ratio of (Selling and distribution costs/Sales) $\times 100\%$

2.5 Sales/capital employed ratio

The sales/capital employed ratio is also called the 'asset turnover ratio'. It measures the amount of sales achieved during the period for each \$1 of investment in assets.

$$\text{Asset turnover ratio} = \frac{\text{Sales}}{\text{Share capital and reserves} + \text{Long - term debt capital}}$$

It is measured as 'x times a year'.

The sales/capital employed ratio is also a ratio of sales to (assets – current liabilities). This is because capital employed = total assets minus liabilities excluding long-term debt.



Example

Using the figures in the previous example, the asset turnover ratio = $\$5,800,000 / \$1,200,000 = 4.83$ times.

Note that:

ROCE = Profit/sales ratio $\times$ Asset turnover ratio
(where profit is defined as profit before interest and taxation).

Using the figures in the previous example:

ROCE	=	Profit/sales	$\times$	Sales/capital employed
$\frac{240,000}{1,200,000}$	=	$\frac{240,000}{5,800,000}$	$\times$	$\frac{5,800,000}{1,200,000}$
20%	=	4.14%	$\times$	4.83 times

2.6 Percentage annual growth in sales

It can be useful to measure the annual growth (or decline) in sales, measured as a percentage of sales in the previous year.

For example, if sales in the year just ended were \$5,800,000 and sales in the previous year were \$5,500,000, the annual growth in sales has been $(\$300,000 / \$5,500,000) \times 100\% = 5.45\%$.

Working capital efficiency ratios

- Purpose of working capital efficiency ratios
- Average time to collect (receivables days or days sales outstanding)
- Average time for holding inventory (inventory turnover)
- Average time to pay suppliers
- Cash operating cycle/working capital cycle
- Working capital efficiency ratios and consolidated accounts

3 Working capital efficiency ratios

3.1 Purpose of working capital efficiency ratios

Working capital efficiency ratios measure the efficiency with which the entity has managed its receivables, inventory and trade payables. The ratios are usually measured in terms of an average number of days.

The working capital ratios are a useful measure of whether the entity has too much or too little invested in working capital.

Excessive investment in working capital is indicated by a long cash cycle (a long working capital cycle) that appears to be getting even longer. When too much is invested in working capital, the return on capital employed and ROSC will be lower than they should be.

Under-investment in working capital is an indication of possible liquidity difficulties. When working capital is low in comparison with the industry average, this might indicate that current assets are being financed to an excessive extent by current liabilities, particularly trade payables and a bank overdraft.

(The cash cycle, also called the operating cycle and the working capital cycle) is explained later.)

3.2 Average time to collect (receivables days or days sales outstanding)

This ratio estimates the time that it takes on average to collect the payment from customers after the sale has been made. It could be described as the average credit period allowed to customers or the 'average collection period'.

$$\text{Average days to collect} = \frac{\text{Trade receivables}}{\text{Sales}} \times 365 \text{ days}$$

Trade receivables should be the average value of receivables during the year. This is the average of the receivables at the beginning of the year and the receivables at the end of the year.

However, the value for receivables at the end of the year is also commonly used.

Sales are usually taken as total sales for the year. However, if sales are analysed into credit sales and cash sales, it is probably more appropriate to use the figure for credit sales only.

The average time to collect money from credit customers should not be too long. A long average time to collect suggests inefficient collection of amounts due from receivables.

3.3 Average time for holding inventory (inventory turnover)

This ratio is an estimate of the average time that inventory is held before it is used or sold.

$$\text{Inventory turnover} = \frac{\text{Inventory}}{\text{Cost of sales}} \times 365 \text{ days}$$

In theory, inventory should be the average value of inventory during the year. This is the average of the inventory at the beginning of the year and the inventory at the end of the year.

However, the value for inventory at the end of the year is also commonly used, particularly in examinations.

3.4 Average time to pay suppliers

The average time to pay suppliers may be calculated as follows:

$$\text{Average time to pay} = \frac{\text{Trade payables}}{\text{Cost of purchases}} \times 365 \text{ days}$$

Trade payables should be the average value of trade payables during the year. This is the average of the trade payables at the beginning of the year and the trade payables at the end of the year.

However, the value for trade payables at the end of the year is also commonly used. When the cost of purchases is not available, the **cost of sales** should be used instead. This figure is obtained from the profit and loss information in the statement of comprehensive income.



Example

The following information is available for The Brush Company for Year 1.

	1 January Year 1	31 December Year 1
	\$	\$
Inventory	300,000	360,000
Trade receivables	400,000	470,000
Trade payables	150,000	180,000

Sales in Year 1 totalled \$3,000,000 and the cost of sales was \$1,800,000.

Required

Calculate the working capital turnover ratios.

a

Answer

Average inventory = $[\$300,000 + \$360,000]/2 = \$330,000$

Average trade receivables = $[\$400,000 + \$470,000]/2 = \$435,000$

Average trade payables = $[\$150,000 + \$180,000]/2 = \$165,000$.

Turnover ratios

Average days to collect = $[435,000/3,000,000] \times 365 \text{ days} = 52.9 \text{ days}$

Inventory turnover period = $[330,000/1,800,000] \times 365 \text{ days} = 66.9 \text{ days}$

Average time to pay = $[165,000/1,800,000] \times 365 \text{ days} = 33.5 \text{ days}$.

3.5 Cash operating cycle/working capital cycle

The cash operating cycle or working capital cycle is the average time of one cycle of business operations:

- from the time that suppliers are paid for the resources they supply
- to the time that cash is received from customers for the goods (or services) that the entity makes (or provides) with those resources and then sells.

A cash cycle or operating cycle is measured as follows. Figures are included for the purpose of illustration:

	Days	Days
Inventory turnover	A	40.2
Average days to collect	B	88.2
		128.4
Average time to pay	(C)	(33.5)
Cash cycle/operating cycle	<u>A + B – C</u>	<u>94.9</u>

The working capital ratios and the length of the cash cycle should be monitored over time. The cycle should not be allowed to become unreasonable in length, with a risk of over-investment or under-investment in working capital.

3.6 Working capital efficiency ratios and consolidated accounts

Working capital efficiency ratios can be calculated from consolidated accounts, in the same way as for the financial statements of an individual company. However, the ratios obtained will be ratios for the group as if it were a single operating unit.

This could be misleading. Poor working capital efficiency in some subsidiaries may be hidden by reasonably good ratios in other subsidiaries.

Liquidity ratios

- The meaning of liquidity
- Current ratio
- Quick ratio or acid test ratio
- Liquidity ratios and consolidated accounts

4 Liquidity ratios

4.1 The meaning of liquidity

Liquidity means having cash or access to cash readily available to meet obligations to make payments

For the purpose of ratio analysis, liquidity is measured on the assumption that the only sources of cash available are:

- cash in hand or in the bank, plus
- current assets that will soon be converted into cash during the normal cycle of trade.

It is also assumed that the only immediate payment obligations faced by the entity are its current liabilities.

There are two ratios for measuring liquidity:

- current ratio
- quick ratio, also called the acid test ratio.

The more suitable ratio for use depends on whether inventory is considered a liquid asset that will soon be used or sold, and converted into cash from sales.

4.2 Current ratio

The current ratio is the ratio of current assets to current liabilities.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

The amounts of current assets and current liabilities in the statement of financial position at the end of the year may be used. It is not necessary to use average values for the year.

It is sometimes suggested that there is an 'ideal' current ratio of 2.0 times (2:1).

However, this is not necessarily true and in some industries, much lower current ratios are normal. It is important to assess the liquidity ratios by considering:

- changes in the ratio over time

- the liquidity ratios of other companies in the same period
- the industry average ratios.

Liquidity should be monitored by looking at changes in the ratio over time.

4.3 Quick ratio or acid test ratio

The quick ratio or acid test ratio is the ratio of current assets excluding inventory to current liabilities. Inventory is excluded from current assets on the assumption that it is not a very liquid item.

$$\text{Quick ratio} = \frac{\text{Current assets excluding inventory}}{\text{Current liabilities}}$$

The amounts of current assets and current liabilities in the statement of financial position at the end of the year may be used. It is not necessary to use average values for the year.

This ratio is a better measurement of liquidity than the current ratio when inventory turnover times are very slow, and inventory is not a liquid asset.

It is sometimes suggested that there is an 'ideal' quick ratio of 1.0 times (1:1).

However, this is not necessarily true and in some industries, much lower quick ratios are normal. As indicated earlier, it is important to assess liquidity by looking at changes in the ratio over time, and comparisons with other companies and the industry norm.

4.4 Liquidity ratios and consolidated accounts

Liquidity ratios are more informative when they are calculated for individual companies. When liquidity ratios are calculated from a consolidated statement of financial position, they are average measures for all the companies in the group. The average liquidity ratios for the group might hide the fact that there may be poor liquidity in some of the subsidiaries in the group.

Debt ratios

- Gearing ratio (leverage)
- Interest cover ratio

5 Debt ratios

Debt ratios are used to assess whether the total debts of the entity are within control and are not excessive.

5.1 Gearing ratio (leverage)

Gearing, also called leverage, measures the total long-term debt of a company as a percentage of either:

- the equity capital in the company, or
- the total capital of the company.

$$\text{Gearing} = \frac{\text{Long - term debt}}{\text{Share capital and reserves}} \times 100\%$$

Alternatively:

$$\text{Gearing} = \frac{\text{Long - term debt}}{\text{Share capital and reserves} + \text{Long - term debt}} \times 100\%$$

It is usually appropriate to use the figures from the statement of financial position at the end of the year. However, a gearing ratio can also be calculated from average values for the year.

When there are preference shares, it is usual to include the preference shares within debt capital.

A company is said to be **high-g geared** or **highly-leveraged** when its debt capital exceeds its share capital and reserves. This means that a company is high-g geared when the gearing ratio is above either 50% or 100%, depending on which method is used to calculate the ratio.

A company is said to be **low-g geared** when the amount of its debt capital is less than its share capital and reserves. This means that a company is low-g geared when the gearing ratio is less than either 50% or 100%, depending on which method is used to calculate the ratio.

A high level of gearing may indicate the following:

- The entity has a high level of debt, which means that it might be difficult for the entity to borrow more when it needs to raise new capital.

- High gearing can indicate a risk that the entity will be unable to meet its payment obligations to lenders, when these obligations are due for payment.

The gearing ratio can be used to monitor changes in the amount of debt of a company over time. It can also be used to make comparisons with the gearing levels of other, similar companies, to judge whether the company has too much debt, or perhaps too little, in its capital structure.

Gearing and consolidated accounts

The gearing ratio for a group of companies is difficult to interpret, because the debt will be spread over several entities in the group.

When measuring gearing, the total capital or equity capital (the denominator in the ratio) should include non-controlling interests (minority interests).

5.2 Interest cover ratio

Interest cover measures the ability of the company to meet its obligations to pay interest.

$$\text{Interest cover} = \frac{\text{Profit before interest and tax}}{\text{Interest charges in the year}}$$

Profit before interest and taxation is calculated by adding the interest charges for the year to the figure for profit before taxation.

An interest cover ratio of less than 3.0 times is considered very low, suggesting that the company could be at risk from too much debt in relation to the amount of profits it is earning.



Example

You are given the following information about Company R:

At 31 December Year 6

	\$000
Total assets	5,800
Share capital	1,200
Reserves	2,400
	3,600
Long-term liabilities (Bank loans)	1,500
Current liabilities	700
	5,800

For the year to 31 December Year 6	\$000
Profit before interest and taxation	700
Interest	<u>(230)</u>
	470
Taxation	<u>(140)</u>
Profit after taxation	<u>330</u>

Required

Use this data to calculate:

- the gearing ratio at 31 December Year 6
- the interest cover in Year 6.

a**Answer**

$$\text{Gearing} = \frac{1,500}{3,600} \times 100\% = 41.7\%$$

Alternatively:

$$\text{Gearing} = \frac{1,500}{(3,600 + 1,500)} \times 100\% = 29.4\%$$

(The company is fairly low-geared.)

$$\text{Interest cover} = \frac{700}{230} = 3.04 \text{ times}$$

(This is fairly low.)

Limitations of interpretation techniques

- Differences in accounting policy
- Other limitations in the use of financial ratios
- Using historical information
- Creative accounting
- Related party relationships and transactions
- Using figures in the statement of financial position
- Non-financial information

7 Limitations of interpretation techniques

There are several limitations or weaknesses in the use of interpretation techniques for analysing the financial position and financial performance of companies. Some of these are limitations of ratio analysis (the method of interpretation most often used) and some are limitations of financial statements and financial information.

7.1 Differences in accounting policy

One of the uses of financial ratios is to compare the financial position and performance of one company with those of similar companies for the same period.

Comparisons between companies might not be reliable, however, when companies use different accounting policies, or have different judgements in applying accounting policies or making accounting estimates. For example:

- Entities might have different policies about the revaluation of non-current assets.
- Entities might use different methods of depreciation.
- Entities might use different judgements in estimating the expected profitability on incomplete construction contracts.
- Entities might use different judgements in assessing whether a liability should be treated as a provision or a contingent liability.

IAS 8 states that an entity should not change its accounting policies unless the change is required by an accounting standard or it will result in more relevant and reliable information. Therefore changes should not happen often.

Where there has been a change in an accounting policy, IAS 8 also requires comparative figures to be restated and information to be disclosed. However, changes in accounting policies and accounting estimates can still make it difficult to compare the financial statements of an entity over time, particularly if analysis is based on extracts rather than the full published financial statements.

7.2 Other limitations in the use of financial ratios

There are other problems with the use of financial ratios, particularly where these are used to compare the performance and position of different entities or of an entity with an industry average.

- It is possible to calculate the same ratio in different ways. For example, there are several variations of return on capital employed (ROCE) and gearing. Comparisons can be misleading if different calculations are used.
- Even where two entities operate in the same industry, comparisons can be misleading. Entities can operate in different markets (for example, high volume/low margin sales and low volume/high margin sales). The size of an entity can affect the way it operates and therefore its ratios. For example, large entities can often negotiate more favourable terms with suppliers than small ones.
- Financial statements are published infrequently. If ratios are used to study trends and developments over time, they are only useful for trends or changes over one year or longer, and not changes in the short term.
- Ratios can only indicate possible strengths or weaknesses in financial position and financial performance. They might raise questions about performance, but do not provide answers. They are not easy to interpret, and changes in financial ratios over time might not be easy to explain.

It can be argued that financial position and financial performance should be analysed using market values rather than accounting values. For example, it can be argued that investment yield is more relevant for the assessment of financial performance than return on capital employed.

7.3 Using historical information

Financial statements are often used to predict the future performance of an entity. Where comparative figures are available for several years it may be possible to extrapolate trends and to base forecasts on these. If comparative figures are only available for one or two years, predictions may be unreliable.

There may be some limited information about future transactions in the notes to the financial statements. For example, details of contingent liabilities and non-adjusting events after the reporting period must be disclosed. However, published financial statements present historical information.

Generally, financial statements do not reflect future transactions or events. They do not anticipate the effect of significant changes to the entity after the financial statements have been authorised for issue. These may include events beyond the control of management (for example, the liquidation of a major customer) or events that could not possibly have been foreseen at the time the most recent financial statements were issued.

It should also be remembered that financial statements are not normally published until several months after the year end. The financial statements are often out of date by the time that they become available.

7.4 Creative accounting

Management may use various forms of **creative accounting** to manipulate the view given by the financial statements while complying with all applicable accounting standards and regulations.

Some of the techniques that can be used have been discussed in earlier chapters. They include:

- **Window dressing:** an entity enters into a transaction just before the year end and reverses the transaction just after the year end. For example, goods are sold on the understanding that they will be returned immediately after the year end; this appears to improve profits and liquidity. The only reason for the transaction is to artificially improve the view given by the financial statements.
- **'Off balance sheet' finance:** transactions are deliberately arranged so as to enable an entity to keep significant assets and particularly liabilities out of the statement of financial position (= 'off balance sheet'). This improves gearing and return on capital employed. Examples include sale and repurchase agreements and some forms of leasing.
- **Changes to accounting policies or accounting estimates:** for example, an entity can revalue assets (change from the cost model to the revaluation model) to improve gearing or change the way in which it depreciates assets to improve profits.
- **Profit smoothing:** manipulating reported profits by recognising (usually) artificial assets or liabilities and releasing them to profit or loss as required.
- **Aggressive earnings management:** artificially improving earnings and profits by recognising sales revenue before it has been earned.
- **Capitalising expenses:** recognising 'assets' which do not meet the definition in the IASB Framework or the recognition criteria. Examples include: human resources, advertising expenditure and internally generated brand names.

Most of these are now effectively prevented by accounting standards. However, management may still attempt 'creative accounting', especially if the entity is suffering falling profits or poor cash flow.

If directors' salaries or bonuses are based on profits or on particular measures, (such as earnings per share), they may try to manipulate that particular measure so that it is as favourable to them as possible.

7.5 Related party relationships and transactions

A user of financial statements will normally expect the financial statements to reflect transactions that have taken place on normal commercial terms ('at arm's length'). The user of the financial statements would want to be informed if:

- transactions have taken place that were not at 'arm's length', or

- there are parties that could enforce transactions on the entity that are not on an 'arm's length' basis.

For example, an entity might sell an asset such as a property to another company owned by one of its directors on more favourable terms than it would sell to a third party.

In this situation, the financial performance or financial position reported by the financial statements would be misleading. There is a special relationship between the parties to the business transactions. This is referred to as a 'related party relationship'.

Related parties of an entity can include:

- parents, subsidiaries and fellow subsidiaries
- associates
- key management personnel (such as directors)
- close family members of any of the above.

A **related party transaction** is:

- a transfer of resources, services, or obligations between related parties
- whether or not a price is charged.

Examples of related party transactions include:

- purchases or sales of goods
- purchases or sales of property and other assets
- rendering or receiving of services
- leases
- finance arrangements (such as loans or contributions to equity).

Related party relationships and transactions are a normal part of business and there is nothing wrong with entering into them. However, a related party relationship can have an effect on the profit or loss, or on the financial position of an entity, because related parties might enter into transactions with each other on terms that other entities or individuals (unrelated parties) would not. For example, where an entity sells goods to a related party, its profits may not be comparable with those of a similar entity that only trades with third parties on normal commercial terms.

7.6 Using figures in the statement of financial position

In practice, ratio calculations are often based on figures in the year-end statement of financial position. These may be very similar to average values for the period, but this is not always the case.

Some businesses are seasonal and make a high proportion of their sales at a specific time of year (for example, in the few months before a national holiday period). Seasonal businesses often arrange their year-ends so that they fall when inventories and receivables are at their lowest (probably just after the main period for sales). Where this happens, ratios such as inventory turnover will be lower than they would be if they were based on the average figure for the year. This means that

ratios may not be strictly comparable with those of other businesses or with industry averages.

Major purchases of assets can have a significant effect on figures in the statement of financial position and on ratios if they take place near the end of the accounting period.

- The carrying value of non-current assets is unusually high, because cost has increased, but a full year's depreciation has not been charged.
- Return on capital employed and asset turnover are reduced, because assets have increased but revenue and profits have not. New assets should generate increased profits, but they have not yet been owned for long enough to do so.

7.7 Non-financial information

One of the most serious limitations of traditional financial statements is that they only reflect the financial effects of transactions. Items are not recognised unless they can be measured reliably in money terms.

There are two problems here:

- Businesses and the transactions that they enter into are becoming increasingly complex. Much information that is relevant to users cannot be expressed easily in monetary terms or in numbers.
- Businesses increasingly accept that they are not only accountable to investors and lenders, but to a much wider group of people, or 'stakeholders'. Stakeholders can include customers, suppliers, employees, the local community as a whole and (for some large public entities) society as a whole. These groups are often more interested in the non-financial effects of an entity's activities, (for example, its effect on the natural environment), than in its financial performance.

Most large and listed entities now include a Business Review, an Operating and Financial Review (sometimes called Management Discussion and Analysis) in their published financial statements. This is a narrative report which sets out management's analysis of the business. Such a review is a legal requirement for many companies within the European Union.

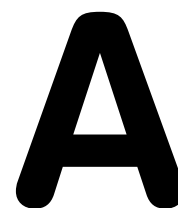
At present entities reporting under IFRSs do not have to publish any non-financial information of this kind. The IASB is currently developing proposals for a standard on non-financial information, but this is unlikely to come into force for several years. However, companies will publish narrative reviews if they are required to do so by national law.

Useful non-financial information

Useful non-financial information could include the following:

- a description of the business, objectives and strategies of the entity
- a narrative review of the performance of the business during the period
- a description of the main risks and uncertainties facing the entity and the ways in which these risks are managed

- details of any significant factors or events that may have an impact on the entity's performance in future
- details of any significant factors or events that may have an impact on the entity's cash flows in future
- information about key relationships with other entities and transactions with related parties, including management
- a description of the entity's research and development activities (if any) and of any material intangible assets, including internally generated intangible assets that have not been recognised in the balance sheet
- additional explanations of amounts included in the financial statements, where appropriate (for example, where these are based on estimates)
- information about the entity's policies in relation to environmental matters, in relation to its employees and on social and community issues.



Answers to exercises and multiple choice questions

Chapter 1: The context and purpose of financial reporting

- 1** **A**
- 2** **B**
- 3** **D**
- 4** **True**
- 5** **C**
Computer repairs and short-term equipment rental are revenue expenditure (expenses)
- 6** **C**
The cost of re-decorating offices is revenue expenditure, because it is a form of maintenance and repair work.

Chapter 2: Characteristics of financial information and the fundamental bases of accounting

- 1** **A**
Faithful representation is a characteristic of reliable information. This is not the same as fair presentation.
- 2** **A**
- 3** **D**
Prudence would require that expenses should not be under-stated in the financial statements.

4 C

The accruals basis should be used to determine the rental expense for the year.
 $(5 \text{ months}/12 \text{ months} \times \$600,000) + (7 \text{ months}/12 \text{ months} \times \$660,000) = \$635,000$

5 C

The accruals basis should be used to determine the rental expense for the year.
 $(2 \text{ months}/6 \text{ months} \times \$42,000) = \$14,000$

Chapter 3: The accounting equation and double entry book-keeping

Exercise 1

Transaction A: Cash –1,000, Loan –1,000

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	1,700						
Inventory	400						
Receivables	900		Capital:				
Stall	500		Original	3,000		Loan	3,000
Van	4,000		Profit	700	+	Trade payables	800
	<u>7,500</u>	=		<u>3,700</u>	+		<u>3,800</u>

Transaction B: Cash –600, Payables –600

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	1,100						
Inventory	400						
Receivables	900		Capital:				
Stall	500		Original	3,000		Loan	3,000
Van	4,000		Profit	700	+	Trade payables	200
	<u>6,900</u>	=		<u>3,700</u>	+		<u>3,200</u>

Transaction C: Cash + 800, Receivables – 800

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	1,900						
Inventory	400						
Receivables	100		Capital:				
Stall	500		Original	3,000		Loan	3,000
Van	4,000		Profit	700	+	Trade payables	200
	<u>6,900</u>	=		<u>3,700</u>	+		<u>3,200</u>

Transaction D: Inventory + 250, Payables + 250

Assets		=	Equity		+	Liabilities	
	\$			\$			\$
Cash	1,900						
Inventory	650						
Receivables	100		Capital:				
Stall	500		Original	3,000		Loan	3,000
Van	4,000		Profit	700	+	Trade payables	450
	<u>7,150</u>	=		<u>3,700</u>	+		<u>3,450</u>

Exercise 2**Capital**

	\$		\$
		(1) Bank	50,000

Bank

	\$		\$
(1) Capital	50,000	(2) Motor van	6,000
(4) Sales	5,000	(3) Purchases	3,000
(8) Trade receivables	4,000	(7) Trade payables	3,000
(12) Bank loan	10,000	(9) Drawings	1,000
		(10) Motor expenses	200
		(11) Insurance	1,500

Motor van

	\$		\$
(2) Bank	6,000		

Purchases

	\$		\$
(3) Bank	3,000		
(5) Trade payables	10,000		

Sales

	\$		\$
		(4) Bank	5,000
		(6) Trade receivables	8,000

Trade payables

	\$		\$
(7) Bank	3,000	(5) Purchases	10,000

Trade receivables

	\$		\$
(6) Sales	8,000	(8) Bank	4,000

Drawings

	\$		\$
(9) Bank	1,000		

Motor expenses

	\$		\$
(10) Bank	200		

Insurance (expense)

	\$		\$
(11) Bank	1,500		

Bank loan

	\$		\$
		(12) Bank	10,000

Exercise 3

	Debit	Credit
(i)	\$	\$
Payables	1,000	
Bank		1,000
Payment to a supplier		
(ii)		
Bank	100	
Sales		100

Cash sale		
(iii)		
Receivables	2,000	
Sales		2,000
Sale on credit		
(iv)		
Purchases	1,500	
Payables		1,500
Purchase on credit		

Multiple choice questions

1 **C**

With credit sales, there is no receipt of cash until the customer eventually pays.

2 **A**

3 **B**

The credit entry is in the bank account, indicating a payment of cash. If the double entry is correct, the narrative should state that the item is a payment of interest to the bank.

4 **D**

The only day books that use double entry are the journal and cash book (when this is also part of the main ledger). The receivables ledger and payables ledger do not use double entry. Double entry is used in the main ledger.

5 **D**

Bank account			
	\$		\$
Opening balance b/f	300	Purchases	12,000
Sales	200	Wages and salaries	18,500
Receivables	38,200	Drawings	1,000
		Closing balance c/f	7,200
	<u>38,700</u>		<u>38,700</u>
Opening balance b/f	7,200		

6 **C**

When a business makes a loss there is a reduction in capital. To maintain the accounting equation, there must be a matching reduction in assets. The reduction in assets might include a fall in cash, but a reduction in cash does not necessarily follow on from a trading loss. For example, suppose that goods costing \$100 are sold for \$60 cash. There is a loss of \$60. This reduction in capital is matched by a reduction in inventory of \$100, less an increase in cash of \$60.

7 **B** False

In a computerised system, it should be sufficient to input an identity code for the supplier, and the system will retrieve all the necessary standing data, such as the supplier's name and address, from the computer files for the system.

- 8 A**
Debit Postage costs (or Sundry expenses) and Credit Cash
- 9 C**
Total capital is increased and there is a matching increase in cash (assets).
- 10 A**
Opening net assets + Profit + Capital introduced – Drawings = Closing net assets.
Opening net assets + \$42,600 + \$17,500 – \$35,900 = \$62,500.
Opening net assets = \$62,500 – \$42,600 – \$17,500 + \$35,900 = \$38,300.

Chapter 4: Recording transactions: sales, purchases and cash

Exercise 1

Accounts in the payables ledger

Supplier W			
	\$		\$
Bank	2,900	Purchases	3,000
Discounts received	100		
	<u>3,000</u>		<u>3,000</u>

Supplier X			
	\$		\$
Purchase returns	2,000	Purchases	6,000
Balance c/f	4,000		
	<u>6,000</u>		<u>6,000</u>
		Balance b/f	4,000

Supplier Y			
	\$		\$
		Purchases	2,000

Supplier Z			
	\$		\$
Bank	2,500	Purchases	7,000
Balance c/f	4,500		
	<u>7,000</u>		<u>7,000</u>
		Balance b/f	4,500

Accounts in the main ledger

Purchases		
	\$	\$
Trade payables	18,000	

Trade payables		
	\$	\$
Bank	5,400	Purchases 18,000
Discounts received	100	
Purchase returns	2,000	
Balance c/f	10,500	
	<u>18,000</u>	<u>18,000</u>
		Balance b/f 10,500

Purchase returns		
	\$	\$
		Trade payables 2,000

Bank		
	\$	\$
		Trade payables 5,400

Discounts received		
	\$	\$
		Trade payables 100

Exercise 2

Sales		
	\$	\$
		Receivables 90,000

Purchases		
	\$	\$
Payables	40,000	

Sales tax			
	\$		\$
Payables	4,000	Receivables	9,000
Balance c/f	5,000		
	<u>9,000</u>		<u>9,000</u>
		Balance b/f	4,000

Receivables			
	\$		\$
Sales/sales tax	99,000		

Payables			
	\$		\$
		Purchases/sales tax	44,000

Exercise 3

Workings

Sales including sales tax = \$179,400

Sales tax in sales = $\$179,400 \times (15/115) = \$23,400$

Sales excluding sales tax = $\$179,400 \times (100/115) = \$156,000$.

Purchases including sales tax = \$95,450

Sales tax in purchases = $\$95,450 \times (15/115) = \$12,450$

Purchases excluding sales tax = $\$95,450 \times (100/115) = \$83,000$.

Sales tax on sundry expenses = $15\% \times \$2,000 = \300 .

Sales account			
	\$		\$
		Receivables	156,000

Purchases account			
	\$		\$
Payables	83,000		

Sales tax account			
	\$		\$
Payables	12,450	Receivables	23,400
Sundry expenses	300		
Balance c/f	10,650		
(balancing figure)	<u>23,400</u>		<u>23,400</u>
		Balance b/f	10,650

Receivables account

	\$		\$
Sales/sales tax	179,400		

Payables account

	\$		\$
Balance c/f	97,750	Purchases/sales tax	95,450
	<u>97,750</u>	Sundry expenses/sales tax	<u>2,300</u>
			<u>97,750</u>
		Balance b/f	97,750

Sundry expenses account

	\$		\$
Payables	2,000		

Multiple choice questions**1 A****Receivables account**

	\$		\$
Balance b/f	74,500	Bank	96,200
Sales (credit sales only)	94,600	Sales returns	2,400
		Discounts allowed	1,800
	<u>169,100</u>	Balance c/f (balancing figure)	<u>68,700</u>
			<u>169,100</u>

2 C**3 C****4 A**

The withdrawal of cash from the bank reduces the bank account balance (so credit bank) and increases the petty cash by restoring it to \$100, so debit Petty cash with \$70.

5 D**Trade payables**

	\$		\$
Bank (cash paid)	328,000	Opening balance b/f	54,000
Discounts received	2,000	Purchases (balancing figure)	356,000
Contra: Receivables	3,000		
Closing balance c/f	<u>77,000</u>		<u>410,000</u>
	<u>410,000</u>		
		Opening balance b/f	77,000

6 D

Receivables			
	\$		\$
Opening balance b/f	104,000	Bank (cash received)	735,000
		Discounts allowed	12,000
		Contra: Trade payables	3,000
Credit sales (balancing figure)	792,000	Closing balance c/f	146,000
	<u>896,000</u>		<u>896,000</u>
Opening balance b/f	146,000		

7 C

The amount shown in the invoice should exclude the settlement discount, which is not accounted for unless the discount is taken. The tax payable is affected by the discount, however.

	\$
List price	400,000
Less: trade discount 10%	<u>(40,000)</u>
Net price	360,000
Sales tax (see below)	<u>51,300</u>
Total amount payable	<u>411,300</u>

This is the amount due from the supplier for the goods, and this is recorded in the receivables ledger in the account for Bull.

If the discount is taken, the amount payable is calculated as follows:

	\$
Net price	360,000
Less: settlement discount (5% × 360,000)	<u>(18,000)</u>
	<u>342,000</u>
Sales tax (15% × 342,000)	<u>51,300</u>

Chapter 5: Inventory**Exercise 1****Prepp****Income statement for the year to 30 June Year 3**

	\$000	\$000
Sales		30,000
Opening inventory	2,000	
Purchases	<u>14,000</u>	
	16,000	
Less: Closing inventory	<u>(1,500)</u>	
Cost of sales		<u>14,500</u>
Gross profit		15,500
Salaries	10,500	

Lighting and heating	500	
Rent	2,000	
Office expenses	<u>1,000</u>	
		<u>14,000</u>
Net profit		<u>1,500</u>

Prepp**Statement of financial position as at 30 June Year 3**

	\$000	\$000
Non-current assets		
Property, plant and machinery		17,500
Current assets		
Inventory	1,500	
Trade receivables	10,000	
Cash	<u>1,000</u>	
		<u>12,500</u>
Total assets		<u>30,000</u>
Equity and liabilities		
Capital at 1 July Year 2		27,500
Net profit for the year		<u>1,500</u>
		29,000
Less: Drawings		<u>(3,000)</u>
Capital at 30 June Year 3		26,000
Current liabilities		
Trade payables		<u>4,000</u>
Total equity and liabilities		<u>30,000</u>

Multiple choice questions**1 B**

	\$
Opening inventory	42,700
Purchases	<u>279,600</u>
	322,300
Less Purchase returns	<u>(3,400)</u>
	318,900
Less: Closing inventory	<u>(48,300)</u>
Cost of sales	<u>270,600</u>

2 D

	\$
Opening inventory	35,400
Purchases	225,500
	<u>260,900</u>
Less Drawings at cost	(8,000)
	<u>252,900</u>
Less: Closing inventory	(28,700)
Cost of sales	<u>224,200</u>

3 B**4 B**

Statement 3 refers to the retail method of valuation.

5 D

Using the FIFO method, closing inventory (750 units) consists of 50 units of the opening inventory plus the units purchased in February and July.

	\$
50 units at \$120	6,000
300 units at \$130	39,000
400 units at \$140	<u>56,000</u>
Closing inventory	<u>101,000</u>

6 A

	Units	Total cost	Cost per unit	
		\$	\$	
Opening inventory	200	16,000	80	
20 May purchase	400	<u>33,200</u>	83	
	600	49,200	82	(= 49,200/600)
8 July sale	<u>(300)</u>	<u>(24,600)</u>	82	
	300	24,600	82	
17 Jan purchase	200	<u>17,400</u>	87	
	500	42,000	84	(= 42,000/500)
3 March sale	<u>(200)</u>	<u>(16,800)</u>	84	
31 March (closing)	<u>300</u>	<u>25,200</u>	84	

Chapter 6: Non-current assets**Exercise 1**

Equipment account			
Year 1	\$		\$
Bank	<u>40,000</u>	Closing balance c/f	<u>40,000</u>
Year 2			
Opening balance b/f	<u>40,000</u>	Closing balance c/f	<u>40,000</u>
Year 3			
Opening balance b/f	40,000		

Accumulated depreciation of equipment account

	\$	Year 1	\$
Closing balance c/f	<u>8,000</u>	Depreciation account	<u>8,000</u>
		Year 2	
		Opening balance b/f	8,000
Closing balance c/f	<u>16,000</u>	Depreciation account	<u>8,000</u>
	<u>16,000</u>		<u>16,000</u>
		Year 3	
		Opening balance b/f	16,000

Depreciation (expense) account

Year 1	\$		\$
Accumulated depreciation a/c	<u>8,000</u>	Income statement	<u>8,000</u>
Year 2			
Accumulated depreciation a/c	<u>8,000</u>	Income statement	<u>8,000</u>

The net book value is \$32,000 at the end of Year 1 and \$24,000 (= \$40,000 – \$16,000) at the end of Year 2.

Exercise 2

- (a) Annual depreciation = $$(126,000 - 24,000)/6 \text{ years} = \$17,000$.

After 4 years:	\$
Asset at cost	126,000
Less accumulated depreciation: $(\$17,000 \times 4)$	<u>68,000</u>
Net book value	<u>58,000</u>

- (b) Initially, the annual depreciation was $$(90,000 - 10,000)/10 \text{ years} = \$8,000$.

After 2 years:	\$
Asset at cost	90,000
Less accumulated depreciation: $(\$8,000 \times 2)$	<u>16,000</u>
Net book value	<u>74,000</u>

Revised annual depreciation from Year 3 onwards = $$(74,000 - 8,000)/4 \text{ years} = \$16,500$.

At end of year 3:	\$
Asset at cost	90,000
Less accumulated depreciation: $(\$8,000 \times 2) + \$16,500$	<u>32,500</u>
Net book value	<u>57,500</u>

- (c) Annual depreciation = $$(60,000 - 0)/5 \text{ years} = \$12,000$.

Depreciation charge in the year of acquisition
 = $\$12,000 \times (8 \text{ months}/12 \text{ months}) = \$8,000$.

(d)

	\$
Cost of the asset	64,000
Year 1 depreciation ($\times 25\%$)	<u>(16,000)</u>
Net book value at end of Year 1	48,000
Year 2 depreciation ($\times 25\%$)	<u>(12,000)</u>
Net book value at end of Year 2	36,000
Year 3 depreciation ($\times 25\%$)	<u>(9,000)</u>
Net book value at end of Year 3	<u>27,000</u>

(e) Annual depreciation = $\$(3,000,000 - 0)/50 \text{ years} = \$60,000$.**Exercise 3**Annual depreciation = $\$(96,000 - 16,000)/5 \text{ years} = \$16,000$.

	\$	\$
Disposal value less disposal costs		68,000
Cost of the asset	96,000	
Accumulated depreciation at the time of disposal (= 2 years $\times$ \$16,000)	<u>32,000</u>	
Net book value at the date of disposal		<u>64,000</u>
Gain on disposal		<u>4,000</u>

Exercise 4Annual depreciation = $\$(216,000 - 24,000)/8 \text{ years} = \$24,000$.

	\$	\$
Disposal value		163,000
Less disposal costs		<u>(1,000)</u>
		162,000
Accumulated depreciation at the time of disposal		
Year to 31 December Year 1: $(\$24,000 \times 7/12)$	14,000	
Years 2 and 3: $(\$24,000 \times 2 \text{ years})$	48,000	
Year to 31 December Year 4: $(\$24,000 \times 8/12)$	<u>16,000</u>	
	78,000	
Cost of the asset	<u>216,000</u>	
Net book value at the date of disposal		<u>138,000</u>
Gain on disposal		<u>24,000</u>

Exercise 5

Working: accumulated depreciation	\$	\$
Cost of the asset	80,000	
Year 1 depreciation ($\times 25\%$)	<u>(20,000)</u>	20,000
Net book value at end of Year 1	60,000	
Year 2 depreciation ($\times 25\%$)	<u>(15,000)</u>	15,000
Accumulated depreciation at date of disposal		<u>35,000</u>

Disposal of asset account

	\$		\$
Bank (disposal costs)	200	Accumulated depreciation	35,000
Motor vehicles account	80,000	Receivables	41,000
		Income statement (balancing figure = loss on disposal)	4,200
	<u>80,200</u>		<u>80,200</u>

Motor vehicles

	\$		\$
Opening balance b/f	720,000	Disposal of asset account	80,000
		Closing balance c/f (= balancing figure)	640,000
	<u>720,000</u>		<u>720,000</u>
Opening balance b/f	640,000		

Motor vehicles accumulated depreciation account

	\$		\$
Disposal of asset account	35,000	Opening balance b/f	250,000
Closing balance c/f (= balancing figure)	215,000		
	<u>250,000</u>		<u>250,000</u>
		Opening balance b/f	215,000

Bank

	\$		\$
Disposal of asset account	41,000	Disposal of asset account	200

Income statement

	\$		\$
Disposal of asset account (loss on disposal)	4,200		

Exercise 6

A company has several motor cars that are accounted for as non-current assets. As at 1 January Year 2, the cost of the cars was \$120,000 and the accumulated depreciation was \$64,000.

During January the company bought a new car costing \$31,000 and was given a part-exchange allowance against an old car that was sold of \$8,000. This car being sold originally cost \$28,000 and its accumulated depreciation is \$18,000.

(a)	\$	\$
Sale proceeds on disposal (part-exchange value)		8,000
Asset at cost	28,000	
Less: Accumulated depreciation	<u>(18,000)</u>	
Net book value at date of disposal		<u>(10,000)</u>
Loss on disposal		<u>(2,000)</u>

(b)

Disposal of asset account

	\$		\$
Motor vehicles account	28,000	Accumulated depreciation account	18,000
		Motor vehicles account (Trade-in value)	8,000
		Loss on disposal (income statement)	2,000
	<u>28,000</u>		<u>28,000</u>

Motor vehicles account

1 January	\$		\$
Opening balance	120,000	Disposal account	28,000
Bank (31,000 – 8,000)	23,000		
Disposal of asset account	8,000	Closing balance	123,000
	<u>151,000</u>		<u>151,000</u>
Opening balance	151,000		

Accumulated depreciation account

1 January	\$		\$
Disposal account	18,000	Opening balance	64,000
Closing balance	46,000		
	<u>64,000</u>		<u>64,000</u>
		Opening balance	46,000

Bank account

	\$		\$
		Motor vehicles account (Cash paid for new car)	23,000

Income statement

	\$	\$
Disposal account (Loss on disposal)	2,000	

Exercise 7

Revaluation account

	\$		\$
Building account	1,000,000	Accumulated depreciation	60,000
Revaluation reserve (= balancing figure)	1,060,000	Building account	2,000,000
	<u>2,060,000</u>		<u>2,060,000</u>

Building account

	\$		\$
Opening balance b/f	1,000,000	Revaluation account	1,000,000
Revaluation account	2,000,000	Closing balance c/f	2,000,000
	<u>3,000,000</u>		<u>3,000,000</u>
Opening balance b/f	2,000,000		

Accumulated depreciation of building account

	\$		\$
Revaluation account	<u>60,000</u>	Opening balance b/f	<u>60,000</u>

Revaluation reserve

	\$		\$
		Revaluation account	<u>1,060,000</u>

Exercise 8

A machine was purchased three years ago on 1 January Year 2. It cost \$150,000 and its expected life was 10 years with an expected residual value was \$30,000.

Due to technological changes, the estimated life of the asset was re-assessed during Year 5. The total useful life of the asset is now expected to be 7 years and the machine is now considered to have no residual value.

$$\begin{aligned}
 \text{Original depreciation} &= \$150,000 - 30,000 / 10 \\
 &= \$12,000 \text{ per annum} \\
 \text{Net book value at start of year 5} &= \$150,000 - (12,000 \times 3) \\
 &= \$114,000
 \end{aligned}$$

If the total useful life is anticipated to be 7 years then there are four years remaining.

$$\begin{aligned}
 \text{Depreciation charge for year 5} &= \$114,000 / 4 \\
 &= \$28,500
 \end{aligned}$$

Multiple choice questions**1 D**

	\$
Original cost	160,000
Depreciation in year to 30 June 2008 (25%)	(40,000)
	120,000
Depreciation in year to 30 June 2009 (25%)	(30,000)
	90,000
Depreciation in year to 30 June 2010 (25%)	(22,500)
	67,500
Disposal value	60,000
Loss on disposal	(7,500)

2 B

The land and buildings are re-valued in the asset account from \$2.1 million to \$2.4 million; therefore debit land and buildings \$300,000. Accumulated depreciation on the building is reduced to \$0; therefore debit accumulated depreciation \$150,000. Credit Revaluation reserve with \$450,000.

3 B

Assets held throughout the year = \$720,000 - \$63,000 = \$657,000.

Depreciation charge	\$
Assets held throughout the year ($657,000 \times 20\%$)	131,400
New asset purchase ($36,000 \times 20\% \times 6/12$)	3,600
Asset disposed of ($63,000 \times 20\% \times 9/12$)	9,450
Total depreciation charge	144,450

4 A

Original annual depreciation charge = $\$(140,000 - 20,000)/10$ years = \$12,000.

The revised depreciation charge applies from 1 July 2009, when the asset is 3 years old and now has an estimated remaining life of 4 years.

	\$
Asset cost	140,000
Accumulated depreciation to 30 June 2009 (3 years)	36,000
Net book value at 30 June 2009	104,000
The remaining depreciable amount is \$84,000 (= \$104,000 - 20,000)	
Remaining useful life 4 years	
Therefore annual depreciation charge from 1 July 2009 = \$21,000	
	\$
Net book value at 30 June 2009	104,000
Depreciation in year to 30 June 2010	21,000
Net book value at 30 June 2010	83,000

5**B**

The depreciation charge after the revaluation is \$100,000 per year (= \$4.8 million/48 years). Before the revaluation it was \$80,000 per year (= \$4 million/50 years). Excess depreciation is therefore \$20,000. The excess depreciation each year is transferred from revaluation reserve to retained profits, but is not reported in profit or loss for the year.

Chapter 7: Accruals and prepayments. Receivables and payables

Exercise 1

Method 1

	\$
Payments in the year: $(42,000 \times 3) + 48,000$	174,000
Accrued expense at the end of Year 3 ($= 48,000 \times 1 \text{ month}/3 \text{ months}$)	16,000
	190,000
Less: Accrued expense at the beginning of the year ($= 42,000 \times 2 \text{ months}/3 \text{ months}$)	(28,000)
Rental expense in the income statement for Year 3	172,000

Method 2

Factory rental expense account			
Year 3	\$		\$
Bank	42,000	Balance b/f (accrual)	28,000
Bank	42,000	Income statement	172,000
Bank	42,000	(balancing figure)	
Bank	48,000		
Balance c/f (accrual)	16,000		
	190,000		190,000
Year 4		Balance b/f (accrual)	16,000

Exercise 2

	\$
Invoices/payments for the year	12,900
+ Opening prepaid expense	1,700
	14,600
– Closing prepaid expense	(1,900)
= Expense for the year	12,700

Exercise 3

Trade receivables			
	\$		\$
Opening balance b/f	77,000	Irrecoverable debts	7,000
Sales	250,000	(bad debts written off)	
		Bank	252,000
		Closing balance c/f	68,000
		(= balancing figure)	
	<u>327,000</u>		<u>327,000</u>
Opening balance b/f	68,000		

Irrecoverable debts expense			
	\$		\$
Trade receivables	7,000	Allowance for irrecoverable debts	1,500
(= bad debts written off)		(= reduction in allowance)	
		Income statement	5,500
		(= balancing figure)	
	<u>7,000</u>		<u>7,000</u>

Allowance for irrecoverable debts			
	\$		\$
Irrecoverable debts	1,500	Opening balance b/f	6,000
(= reduction in allowance)			
Closing balance c/f	4,500		
	<u>6,000</u>		<u>6,000</u>
		Opening balance b/f	4,500

Multiple choice questions**1****B**

Statement of financial position	\$
Year end receivables \$(942,000 – 86,000)	856,000
Allowance for irrecoverable debts	(65,000)
Net trade receivables	<u>791,000</u>

2**A**

Insurance costs to 30 June 2010	\$
Premium for 9 months 1 July 2009 – 31 Mar 2010 (9/12 × \$27,600)	20,700
Premium for 3 months 1 April 2010 – 30 Jun 2010 (3/12 × \$30,000)	7,500
Insurance cost for year to 30 June 2010	<u>28,200</u>

At 30 June 2010, insurance has been prepaid for the 9-month period 1 July 2010 – 31 March 2011. This prepayment is $(9/12 \times \$27,600) = \$22,500$.

3**D**

Rental income	\$	\$
Cash received		948,300
Exclude from profit and loss for the year		
Rent received in advance for next year	138,100	
Cash received for rent in arrears for previous year	<u>5,700</u>	
		(143,800)
Include in profit and loss for the year		
Rent received last year for current year	127,900	
Rent in arrears for current year, not yet received	<u>9,400</u>	
		137,300
Total rental income for year to 30 June		<u>941,800</u>

4**A**

Payables			
	\$		\$
Cash paid to suppliers	491,000	Balance b/f	212,500
Discounts received	2,700	Purchases	447,000
Contras: receivables ledger	12,800	Refunds from suppliers	3,200
Purchases returns	7,600		
Balance c/f (balancing figure)	<u>148,600</u>		
	662,700		<u>662,700</u>

5**A**

	\$
For the 4 months 1 December 2009 – 31 March 2010: $4/12 \times \$240,000$	80,000
For the 8 months 1 April – 30 November 2010: $8/12 \times \$288,000$	192,000
Total insurance cost for the year	<u>272,000</u>

At 30 November 2010, there is a prepaid expense for rent for December 2010. The prepayment is therefore \$24,000 (= \$288,000/12 months). This prepayment will be included in current assets in the statement of financial position as at 30 November 2010 (a debit balance).

In the same way at 30 November 2009, the previous year, there was prepaid rent for December 2009 of \$20,000.

The total amount to be charged to the income statement for the year to 30 November 2010 could also be calculated as follows:

	\$
Payment on 1 January	60,000
Payments on 1 April, 1 July, 1 October	216,000
+ Opening prepaid expense (for December 2009)	<u>20,000</u>
	296,000

– Closing prepaid expense (for December 2008)	<u>(24,000)</u>
= Expense for the year	<u>272,000</u>

6 A

	\$	\$
Irrecoverable debts written off		29,000
Allowance at end of year $5\% \times \$ (749,000 - 29,000)$	36,000	
Allowance at beginning of year	<u>44,000</u>	
Reduction in allowance for irrecoverable debts		<u>(8,000)</u>
Total charge for the year		<u>21,000</u>

7 C

Receivables ledger control account			
	\$		\$
Opening balance	268,900	Cash from credit customers	106,400
Interest charged on overdue accounts	1,600	Discounts allowed	2,400
Credit sales	115,800	Bad debts written off	5,900
		Contras against payables	5,300
		Closing balance	<u>266,300</u>
	<u>386,300</u>		<u>386,300</u>

Note: Cash sales (Debit Bank, Credit Sales) and changes in the allowance for receivables are not recorded in the receivables ledger accounts or the total account for receivables.

Chapter 8: Provisions and contingencies

Multiple choice questions

1 D

A provision cannot be made for future operating losses. A provision can be made for future reorganisation costs under certain circumstances.

2 C

When the likelihood of a future obligation is less than probable but more than remote, it should be disclosed as a contingent asset. When the obligation becomes probable, it should be recognised as a liability (in this case as a provision).

3 A

The likelihood of an obligation arising in (1) is possible but not probable; therefore it should be disclosed in a note as a contingent liability. There is an obligation for the company to meet warranty claims and a future obligation is certain (even though it

is difficult to estimate accurately). A provision for warranty costs should therefore be made.

- 4 D**
When a contingent asset is 'recognised', this means that it is treated as an asset in the statement of financial position. This occurs when the economic benefits are virtually certain to arise.
- 5 C**
The provision should be for the most likely amount, which is \$400,000 in this situation.
- 6 B**

Chapter 9: Capital structure and finance costs

Exercise 1

Share capital	=	\$600,000 + 400,000
	=	\$1,000,000
Share premium	=	400,000 shares × \$2.20 premium
	=	\$880,000

Exercise 2

Number of shares in issue = 800,000 shares at \$0.25 each.

New shares issued = $800,000 \times 2/5 = 320,000$.

Cash raised = $320,000 \text{ shares} \times \$2.25 = \$720,000$.

Increase in issued share capital = $320,000 \text{ shares} \times \$0.25 = \$80,000$.

Increase in share premium = $320,000 \text{ shares} \times (\$2.25 - \$0.25) = \$640,000$.

After the rights issue	\$000
Non-current assets	780
Current assets (170 + 720)	890
Total assets	1,670
Equity and liabilities	
Share capital: ordinary shares of \$0.25 each	280
Share premium (70 + 640)	710
Retained earnings	330
Total equity	1,320
Non-current liabilities	200
Current liabilities	150
Total equity and liabilities	1,670

Exercise 3

	Share capital	Share premium	Retained earnings
	\$000	\$000	\$000
Before the bonus issue	400	170	520
Bonus issue ($400 \times 1/2$)	200	(170)	(30)
After the bonus issue	600	0	490

Statement of financial position after the bonus issue \$000

Non-current assets	1,230
Current assets	510
Total assets	1,740

Equity and liabilities

Share capital: ordinary shares of \$0.25 each	600
Retained earnings	490
Total equity	1,090
Non-current liabilities	400
Current liabilities	250
Total equity and liabilities	1,740

Exercise 4

	Share capital	Share premium	Reval'n surplus	Retained earnings	Total
	\$000	\$000	\$000	\$000	\$000
At 1 January Year 3	500	100	120	480	1,200
Rights issue of shares	100	120			220
Bonus issue of shares	200	(200)			
Equity dividends paid				(200)	(200)
Profit after tax				400	400
Other comprehensive income: gain on revaluation of property			100		100
At 31 December Year 3	800	20	220	680	1,720

Multiple choice questions**1 A****2 D**

Equity dividends paid are disclosed in the statement of changes in equity, but dividends that have been declared are disclosed in a note to the statements. Dividend payments reduce total reserves (retained profits) in the statement of financial position, but they are not separately disclosed in either the income statement or the statement of financial position.

3 C

A bonus issue involves the transfer of some reserves (usually share premium) to share capital, but total share capital plus reserves remain unchanged.

4 A

	Share capital	Share premium
	\$	\$
At 1 July 2009	200,000	160,000
1 for 2 bonus issue	100,000	(100,000)
	300,000	60,000
2 for 5 rights issue (120,000 shares, premium \$1 per share)	120,000	120,000
At 30 June 2010	420,000	180,000

5 A

	Sales	Share capital	Share premium
	\$	\$	\$
What was recorded	Cr 1,000,000	-	-
What should have been recorded	-	Cr 200,000	Cr 800,000
Adjustment to correct the error	Dr 1,000,000	Cr 200,000	Cr 800,000

Chapter 10: Trial balance, correcting errors and suspense accounts**Exercise 1**

The errors are corrected as follows.

Journal entry	Debit	Credit
	\$	\$
Error 1		
Sales returns	800	
Suspense account		800
Purchases returns	800	
Suspense account		800
Error 2		
Suspense account	1,000	
Sales		1,000

The opening balance on the suspense account is a debit balance, since total credits are higher than total debits by \$600.

Suspense account			
	\$		\$
Opening balance	600	Sales returns	800
Sales	1,000	Purchases returns	800
	<u>1,600</u>		<u>1,600</u>

Multiple choice questions

1 **D**

2 **A**

For Item B, if the narrative is correct the debits and credits would be the other way round. For Item C, the error is corrected by Debit Rent expenses \$34,000, Credit Rental income account \$34,000. For Item D, the correct entry should be Debit Wages and Salaries, credit Cash (or Mr Lima's personal account).

3 **A**

The errors in 3 and 4 do not involve different amounts of debit and credit entries; therefore a suspense account is not required to correct the error.

4 **A**

Omissions – a failure to record either the debit or the credit side of a transaction - do not make total debits and total credits different. The error in B results in higher total credit balances than debit balances.

5 **C**

Where we are: Discounts allowed: Debit \$4,510

Discounts received: Credit \$3,520

Where we want to be: Discounts allowed: Debit \$3,520

Discounts received: Credit \$4,510

To correct:

Credit: Discounts allowed: \$990

Credit: Discounts received: \$990

So Debit: Suspense account \$1,980

Chapter 11 Control accounts and bank reconciliations

Exercise 1

	\$
Bank balance in the bank statement	7,400
Items recorded in the cash book, but not yet in the bank statement	
Cheques received from customers and banked	16,200
Cheques paid but not yet presented for payment	(18,500)
	<u>5,100</u>
Items in the bank statement, not in the cash book	
Bank charges	250
Balance in the cash book	<u>5,350</u>

This cash book balance is before recording the bank charges in the ledger.

The bank charges should be recorded in the ledger as follows:

Debit Bank charges account (expense), Credit Cash book (= Bank)

Exercise 2

- (a) Note: A debit balance in the **cash book** means that, according to the entity's accounting records, it has money in the bank. A debit balance on a **bank statement**, on the other hand, would indicate an overdraft.

	\$	\$
Bank balance in the cash book		1,600
Items recorded in the cash book, but not yet in the bank statement		
Cheques received from customers and banked		(8,200)
Cheques paid but not yet presented for payment		4,700
		<u>(1,900)</u>
Items in the bank statement, not in the cash book		
Bank charges	(150)	
Direct debit payment	(400)	
Dishonoured cheque	(300)	
		<u>(850)</u>
Balance in the bank statement (= overdraft balance)		<u>(2,750)</u>

(b) The ledger accounts should be updated as follows:

	Debit	Credit
	\$	\$
Bank charges (expense account)	150	
Expense account to which the direct debit payment relates	400	
Receivables (dishonoured cheque) or bad debts expense	300	
Bank (cash book)		850

Multiple choice questions

1 D

	\$
Bank statement balance	(2,850)
Add: Deposits not yet credited	12,700
Deduct: Outstanding cheques	(7,920)
Correct cash book balance	<u>1,930</u>

2 A

If a cheque from a customer is dishonoured, a credit entry is recorded in the cash book.

3 B

The error makes the balance on the control account lower than the total of balances on the accounts in the payables ledger. The other three errors, if corrected, would make the difference between the totals even larger.

4 A

5 D

	\$	\$
Zed statement: amount owed by Dee		9,440
Deduct: Cheque sent by Dee		<u>(3,700)</u>
Adjusted balance		5,740
Balance in Dee's payables ledger account for Zed	4,770	
Adjusted for discount not allowed	<u>80</u>	
Adjusted balance		<u>4,850</u>
Unexplained difference		<u>890</u>

6 B

	\$
Total of payables ledger balances	289,500
Contra entry not recorded in payables ledger	(690)
Invoice under-stated in payables ledger (8,720 – 7,820)	<u>900</u>
Adjusted balance	<u>289,710</u>

This should be the correct balance in the payables ledger control account after the error in recording total purchases returns is corrected.

Chapter 12 Preparing financial statements

Exercise 1

Income statement	\$
Current year	65,000
Under-provision in previous year (59,000 – 54,000)	5,000
Tax charge	70,000

Statement of financial position	
Current liabilities: Income taxes	65,000

Multiple choice questions

1 C

2 B

Item 1 leaves working capital unchanged, because trade payables and cash are both reduced by \$2,000. Item 2 increases current assets by \$1,000 (\$2,000 in inventory becomes \$3,000 cash or receivables) and there is an increase in capital (profit) of \$1,000. Item 3 also increases cash (current asset) and profit by \$1,000.

3 C

Current assets	\$
Loan principal receivable in January Year 4 (asset)	20,000
Accrued interest receivable on loan	600
Prepayment of insurance ($(\$18,000 \times 10/12)$)	15,000
Rent income accrued for Year 3	8,000
Inventory at 30 June Year 2	<u>43,600</u>

4 D

Adjusting events result in an alteration of the figures in the draft financial statements; details are not disclosed of adjusting events in notes to the financial statements, only details of non-adjusting events.

5 A

	\$
Initial inventory valuation	363,800
Transactions after the reporting period	
Deduct: Purchase of goods	(12,500)
Add back: Cost of goods sold ($60\% \times \$14,000$)	8,400
Add back: Purchase returns by Z	600
Inventory at 30 June Year 2	<u>360,300</u>

6 A

Item 3 is a non-adjusting event.

7 C

Both events provide evidence of conditions that existed at the end of the reporting period.

Chapter 13 Statements of cash flows**Exercise 1**

Workings	\$
Original cost of vehicle	50,000
Accumulated depreciation at date of disposal	(20,000)
Net book value at the time of disposal	30,000
Loss on disposal	8,000
Therefore net sales proceeds	22,000

- (a) In the adjustments to get from the operating profit to the cash flow from operations, the loss on disposal of \$8,000 should be added.
- (b) Under the heading 'Cash flows from investing activities', the sale price of the vehicle of \$22,000 should be included as a cash inflow.

Exercise 2

	\$	\$
Profit before taxation	60,000	
Adjustments for:		
Depreciation	25,000	
Interest charges	10,000	
Gain on disposal of non-current asset	(14,000)	
	81,000	
Reduction in trade and other receivables	5,000	
Increase in inventories	(4,000)	
Reduction in trade payables	(6,000)	
	76,000	
Taxation paid	(17,000)	
Interest charges paid	(10,000)	
Cash flows from operating activities		49,000

Exercise 3

Property, plant and equipment purchases	\$
At cost or valuation at the end of the year	381,000
At cost or valuation at the beginning of the year	329,000
	52,000
Add: Cost of assets disposed of in the year	40,000
Subtract: Asset revaluation during the year (102,000 – 67,000)	(35,000)
Purchases during the year	57,000

Disposal of equipment	\$
At cost	40,000
Accumulated depreciation, at the time of disposal	(21,000)
Net book value/carrying amount at the time of disposal	19,000
Loss on disposal	5,000
Net disposal value (= assumed cash flow)	15,000

Multiple choice questions

1 **B**

2 **C**

3 **D**

4 **D**

Cash inflow from share issues = \$(500,000 + 300,000) - \$(300,000 + 100,000) = \$400,000.

Cash payments to repay loans = \$(40,000 + 20,000) - \$(60,000 + 15,000) = \$(15,000).

Chapter 14 Incomplete records

Exercise 1

Receivables memorandum account			
	\$		\$
Opening balance	2,400	Money banked	12,500
Sales (bal fig)	12,100	Bad debt written off	200
		Closing balance	1,800
	<u>14,500</u>		<u>14,500</u>

Exercise 2

Payables memorandum account			
	\$		\$
Cash paid	11,300	Opening balance	1,400
Closing balance	1,900	Purchases (bal fig)	11,800
	<u>13,200</u>		<u>13,200</u>

Exercise 3

Cash and bank memorandum account			
	\$		\$
Opening balance, cash in hand	100	Payments to suppliers	38,200
Opening balance, bank	2,400	Payments to employees	3,400
Receipts	51,700	Drawings (= balancing figure)	7,250
		Closing balance, cash in hand	150
		Closing balance, bank	5,200
	<u>54,200</u>		<u>54,200</u>

Exercise 4

Cost of sales	\$
Opening inventory	3,100
Purchases	42,100
Less: closing inventory	<u>(4,000)</u>
	<u>41,200</u>

$$\text{Sales} = 41,200 \times 140\% = \$57,680$$

Exercise 5

$$\begin{aligned} \text{Sales} &= \$98,000 \\ \text{Cost of sales} &= \$98,000 \times 100/140 \\ &= \$70,000 \end{aligned}$$

Cost of sales	\$
Opening inventory	5,000
Purchases	<u>71,200</u>
Closing inventory (balancing figure)	<u>6,200</u>
Cost of sales	<u>70,000</u>

Multiple choice questions**1 D**

	\$
Inventory at 1 March	127,000
Purchases for March	<u>253,000</u>
	380,000
Closing inventory	<u>76,000</u>
Cost of sales + cost of lost inventory	304,000
Cost of sales (\$351,000 × 70%)	<u>245,700</u>
Inventory lost in the fire	<u>58,300</u>

2 A

It is assumed that all sales for the month should have been banked. Since sales were \$190,000, this suggests that the cost of sales should have been \$95,000 (given a mark-up of 100% on cost).

	\$
Opening inventory	80,000
Purchases for the month	<u>120,000</u>
	200,000
Closing inventory	<u>100,000</u>
Cost of sales on the basis of these figures	100,000
Cost of sales assuming sales of \$190,000	<u>95,000</u>
Discrepancy	<u>5,000</u>

This indicates that inventory costing \$5,000 might have been stolen.

Alternatively, \$10,000 cash might have been stolen and sales might have been \$200,000 (giving a cost of sales of \$100,000).

3 C

	\$
Net assets at 31 December (376,000 – 108,000)	268,000
Net assets at 1 January (314,000 – 87,000)	<u>227,000</u>
Increase in net assets	41,000
Drawings	55,000
New capital introduced in the year	<u>(25,000)</u>
Profit for the year	<u>71,000</u>

Q&A

Practice questions

Contents		
		<i>Page</i>
Recording transactions: sales, purchases and cash		
1	May transactions	415
2	June transactions	415
3	July transactions	416
Non-current assets		
4	Revaluation	417
5	Owen	417
Provisions and contingencies		
6	IAS37	418
Trial balance, correcting errors and suspense accounts		
7	Suspense	419
Control accounts and bank reconciliations		
8	Control accounts	419
9	Control account reconciliation	420

Preparing financial statements		
10	SWAN	421
11	Stephen Chee	422
12	Herbert	423
13	Bell	424
14	Team Company financial statements	424
15	Blot Company	425
16	SAW Company	426
Statements of cash flows		
17	King Company	427
18	Dove statement of cash flows	428
19	Hart statement of cash flows	429
Incomplete records		
20	Miss Ringer	430
21	Faye	431

1 May transactions

The following transactions in May Year 6 are those of a new business entity, Home Oak Garden Traders.

May Year 6

Date

- 1 Set up the entity with capital in cash: \$2,500.
- 2 Bought goods on credit from the following suppliers: The Bushes Company \$540, Flower City \$870, D Gibson \$250, Weedkill \$760, T Greenery \$640. (Total \$3,060).
- 4 Sold goods on credit to: The Office Company \$430, V Cork \$640, Texas Chain Stores \$1,760. (Total \$2,830).
- 6 Paid rent \$120.
- 9 The Office Company paid the \$430 that it owed.
- 10 Texas Chain Stores paid \$1,500.
- 12 The following payments were made: to D Gibson \$250 and to The Bushes Company \$540. (Total \$790).
- 15 Advertising costs of \$230 were paid to the local newspaper publisher.
- 18 Bought goods on credit from the following suppliers: The Bushes Company \$430, Landscape \$1,100. (Total \$1,530).
- 21 Sold goods on credit to Public Parks \$670
- 31 Paid rent \$180.

Required

- (a) You are required to use T accounts to show how these transactions should be recorded in the main ledger accounts of the entity. The accounting system contains a receivables ledger and a payables ledger for individual accounts, and there are control accounts (total accounts) for receivables and payables in the main ledger.
- (b) Prepare a trial balance as at 31 May Year 6.

2 June transactions

The following transactions in June Year 7 are those of a new business entity, Parakeet.

June Year 7

Date

- 1 Set up the entity with capital in cash: \$6,500.
- 2 Bought goods on credit from C Jones \$1,800
- 3 Credit sales: J Bird \$660, D Swann \$250, Swallow Company \$430. (Total \$1,340).
- 4 Purchased goods for cash \$230.
- 5 Bought second-hand motor van for \$2,560, paying by cheque.
- 7 Paid motor expenses \$120.
- 9 Credit sales: M Parrott \$240, Canary Company \$260, G Finch \$680. (Total \$1,180).

- 11 Purchased goods on credit: C Jones \$2,400, E Davies \$620, A Evans \$460. (Total \$3,480).
- 13 Purchases returned to C Jones \$250.
- 19 Sales returns from D Swann \$110.
- 20 Cash drawings taken by owner \$440.
- 21 Payments made to E Davies \$620, A Evans \$460. (Total \$1,080).
- 23 Received payment from J Bird \$660.
- 25 Received payment from Swallow Company \$430.
- 28 Purchases returned to C Jones \$420.
- 29 Purchased stationery \$40 (record as a sundry expense).
- 30 Credit sales: D Swann \$420, Canary Company \$540. (Total \$960).

Required

- (a) Prepare journal entries to show how the following transactions in June Year 7 should be recorded in the main ledger accounts of Parakeet, a newly-established business entity.
The accounting system contains a receivables ledger and a payables ledger for individual accounts, and there are control accounts (total accounts) for receivables and payables in the main ledger.
You are not required to include any narrative in the journal entries.
- (b) List the transactions that will be entered in the receivables ledger accounts for the month.
- (c) List the transactions that will be entered in the payables ledger accounts for the month.

3 July transactions

Prepare journal entries to show how the following transactions in July Year 8 should be recorded in the main ledger accounts of Entity DZ. (Narrative descriptions for the journal entries are not required.)

Sales tax is at the rate of 15%.

July Year 8

Transaction

- 1 Credit sales \$250,000 plus sales tax
- 2 Cash sales \$10,000 plus sales tax
- 3 Purchases \$108,100 including sales tax
- 4 Sales tax paid to the tax authorities: \$11,160
- 5 Petty cash expenses: travel \$240, sundry expenses \$345 (including sales tax). There is no value added tax on travel expenses, but value added tax is payable on other expenses
- 6 Cash withdrawn from bank for petty cash: \$417
- 7 Sales returns \$2,000 plus sales tax

4 Revaluation

MB Company bought an asset on 24 July Year 1 at a cost of \$180,000. The asset had an expected useful life of 10 years and an expected residual value of \$20,000. The company applies straight-line depreciation to this category of non-current assets. It also charges a full year's depreciation in the year of acquisition and no depreciation in the year of disposal. Its financial year ends on 31 December.

At 31 December Year 2, the company re-valued the asset to \$240,000. Its expected remaining useful life is now 8 years, but its expected residual value is zero.

Required

- Show in T account format the book-keeping entries required to record the revaluation of the asset on 31 December Year 2.
- The asset was sold on 12 February Year 4 for \$225,000. Calculate the gain or loss on disposal reported in the income statement for Year 4, and show the total effect of the disposal on the retained earnings of the company. Ignore taxation.

5 Owen

Owen is in business as a haulage contractor. At 1 May Year 6 he had three lorries, details of which are as follows:

Lorry registration number	Date purchased	Cost	Accumulated depreciation to date
		\$	\$
BOW 1	1 July Year 3	16,000	9,000
COW 2	1 January Year 5	21,000	8,000
DOW 3	1 April Year 6	31,000	6,000

During the year to 30 April Year 7, the following lorry transactions took place:

- BOW 1 was sold on 31 July Year 6 for \$3,000 on cash terms. On 1 August Year 6 Owen replaced it with a new lorry, registration number FOW 4 for which he paid \$35,000 in cash.
- On 15 December Year 4, the new lorry (FOW 4) was involved in a major accident, and as a result was completely written off. Owen was able to agree a claim with his insurance company, and on 31 December Year 6 he received \$30,000 from the insurance company. On 1 January Year 7 he bought another lorry (registration number HOW5) for \$41,000.
- During March Year 7, Owen decided to replace the lorry bought on 1 April Year 6 (registration number DOW 3) with a new lorry. It was delivered on 1 April Year 7 (registration number JOW 6). He agreed a purchase price of \$26,000 for the new lorry, the terms of which were \$20,000 in part-exchange for the old lorry and the balance to be paid immediately in cash.

Notes:

- Owen uses the straight-line method of depreciation based on year-end figures.

- (2) The lorries are depreciated over a five-year period by which time they are assumed to have an exchange value of \$1,000 each.
- (3) A full year's depreciation is charged in the year of acquisition, but no depreciation is charged if a lorry is bought and sold or otherwise disposed of within the same financial year.
- (4) No depreciation is charged in the year of disposal.
- (5) Owen does not keep separate ledger accounts for each individual lorry.

Required

- (a) Write up the following accounts for the year to 30 April Year 7:
 - (i) lorries account
 - (ii) lorries disposal account
 - (iii) allowance for depreciation on lorries account.
- (b) Show how the lorries account and the allowance for depreciation account would be presented in Owen's statement of financial position as at 30 April Year 7.

6 IAS 37

Munch Company is a company of food manufacturers and processors, whose shares are traded on the stock market. It is preparing its financial statements for the year ended 31 December Year 6. The following items are being considered.

- (a) The company is involved in several legal disputes. For each case, legal experts have studied the available evidence and have estimated the probability of winning the case. Details are as follows:

Case	Details	Probability of winning the case
1	The company is suing its investment bank for \$250,000	80% - 90%
2	The company is being sued by a customer for \$400,000	30%
3	The company is being sued by a shareholder for \$100,000	3% - 4%
4	The company is being sued by a supplier for \$150,000	60% - 70%

In each case, the amounts involved are material.

- (b) The government has introduced new regulations requiring improvements in refrigeration equipment for foods held by producers and sellers of food products. The modifications must be made within the next two to three years. The company has not yet made any of the required modifications to its refrigeration equipment.
- (c) On 14 December Year 6 the board of directors of Munch Company decided to close down one of its business operations. A detailed plan for the closure has not yet been drawn up and the employees who will be affected by the closure have not yet been informed.

Required

Explain how each of these items should be reported, if at all, in the annual report and accounts for Munch Company for the year ended 31 December Year 6.

7 Suspense

The accountant of Grant Company has prepared a trial balance, but has found that the total of debit balances is \$862,150 and the total of credit balances is \$864,600.

On investigation, he discovers the following errors in the book-keeping:

- (1) Total purchases in the period were recorded at \$100 below their correct value, although the total value of trade payables was correctly recorded.
- (2) Total telephone expenses were recorded at \$1,000 above their correct amount, although the total value of the amounts payable was correctly recorded.
- (3) Purchase returns of \$550 were recorded as a debit entry in the sales returns account, but the correct entry had been made in the trade payables control account.
- (4) Equipment costing \$2,000 had been recorded as a debit entry in the repairs and maintenance account.
- (5) Rental expenses of \$5,490 were entered incorrectly as \$5,940 in the expense account but were entered correctly in bank account in the ledger.
- (6) Bank charges of \$200 have been omitted entirely from the ledger.

Required

Prepare journal entries for the correction of the errors.

Open a suspense account. Record the appropriate corrections in the suspense account, so that the balance on this account is eliminated.

8 Control accounts

The following are transactions of Kwark, a new business, during May Year 6.

May Year 6**Transaction**

- 1 Started the business with capital of \$2,500, paid into a business bank account.
- 2 Bought goods on credit from the following entities: Ellis \$810; Mendez Trading \$1,305; Gibson \$375; Dynasty \$1,140; Liners \$960. (Total \$4,590).
- 3 Sold goods on credit to: Bailey Stores \$753; Fastshop \$1,120; Spencers \$3,080. (Total \$4,953).
- 4 Bailey Stores paid by cheque \$723. A discount of \$30 was allowed for early payment.
- 5 Spencers paid \$1,500 by cheque
- 6 The following payment was made: Ellis \$700

- 7 The following payment was made Gibson \$350. A discount of \$25 was received for early payment.
- 8 Paid carriage outwards \$345
- 9 Purchase returns to Dynasty \$400
- 10 Sales returns from Spencers \$270
- 11 Purchases on credit from Mendez Trading \$753; Dynasty \$1,650. (Total \$2,403).
- 12 Sold goods on credit to Fastshop \$1,005.

Kwark has control accounts (total accounts) for total trade receivables and total trade payables in the main ledger, and accounts for individual customers and suppliers in a receivables ledger and a payables ledger respectively.

Required

- (a) Use T accounts to show how the relevant transactions will be recorded in the trade receivables and trade payables accounts in main ledger of Kwark in May. (You are not required to prepare T accounts for any of the other main ledger accounts.)
- (b) Reconcile the balance on the trade receivables and trade payables control accounts in the main ledger with the sum of the balances on the individual accounts in the receivables ledger and payables ledger respectively.

9 Control account reconciliation

The balance on the trade payables control account is \$79,500. This does not agree with the sum of the balances on the accounts in the payables ledger.

On investigation, you discover the following errors:

- (1) Purchases of \$1,850 from Supplier A have been recorded in the payables control account, but not in the supplier's account in the payables ledger.
- (2) A payment of \$2,000 to Supplier B has been correctly recorded in the bank account in the ledger, but not in Supplier B's account in the payables ledger.
- (3) A discount received of \$300 from Supplier C has been recorded correctly in the payables control account, but not in Supplier C's account in the payables ledger.
- (4) Purchase returns to Supplier D of \$1,500 have been correctly recorded in Supplier D's account in the payables ledger, but have not been recorded at all in the main ledger.

Required

Prepare journal entries to correct the errors. (*Note:* When the error is in the payables ledger, only one entry, a debit or a credit, is required as a journal entry.)

State the correct total balance for trade payables.

10 SWAN

The following balances were extracted from the main ledger of SWAN at 31 December Year 7.

	\$
Capital	10,059
Inventory at 1 January Year 7	2,720
Cash in hand	55
Bank overdraft	2,522
Sundry receivables	7,009
Sundry payables	6,735
Motor vans (Cost \$2,000)	1,500
Drawings in cash	2,459
Fixtures and fittings (Cost \$4,000)	3,800
Purchases	33,436
Allowance for irrecoverable debts	162
Sales	50,261
Purchases returns	120
Carriage inwards	546
Rent	626
Salaries and wages	5,226
Motor vehicle expenses	920
Interest on bank overdraft and bank charges	56
Carriage outwards	720
Discounts allowed	65
Discounts received	59
Returns inwards	240
Freehold land	10,300
Bad debts	240

You are given the following information:

- (1) The inventory at 31 December Year 7 was \$4,270.
- (2) Wages and salaries payable at 31 December Year 7 were \$426.
- (3) Rent paid in advance at 31 December Year 7 amounted to \$100.
- (4) The allowance for irrecoverable debts is to be increased to \$260.
- (5) Depreciation is to be charged as follows: motor vans at 25% per year on cost, fixtures and fittings 5% per year on cost.
- (6) During Year 7, the owner of SWAN withdrew goods valued at \$180 for his own use. No entry has been made in the accounts for the withdrawal of these goods.
- (7) One quarter of the motor vehicle expenses is the cost of the owner's private motoring, as distinct from expenses for business purposes.

Required

Prepare an income statement for the year ending on 31 December Year 7 and a statement of financial position as at that date.

11 Steven Chee

The following trial balance was extracted from the main ledger of Steven Chee, a sole trader, as at 31 May Year 6 – the end of his financial year.

Steven Chee

Trial balance as at 31 May Year 6

	DR	CR
	\$	\$
Land and buildings at cost	120,000	
Equipment at cost	80,000	
Provision for depreciation (as at 1 June Year 5)		
On land and buildings		20,000
On equipment		38,000
Purchases	250,000	
Sales		402,200
Inventory as at 1 June Year 5	50,000	
Discounts allowed	18,000	
Discounts received		4,800
Returns outwards		15,000
Wages and salaries	61,800	
Bad debts	4,600	
Loan interest	2,100	
Other operating expenses	17,700	
Trade payables		36,000
Trade receivables	38,000	
Cash in hand	300	
Bank	1,300	
Drawings	24,000	
Allowance for doubtful debts		500
7% long-term loan		30,000
Capital as at 1 June Year 5		121,300
	<u>667,800</u>	<u>667,800</u>

The following additional information is available:

- Inventory as at 31 May Year 6 has been valued at cost at \$42,000.
- There are accrued wages and salaries of \$800
- Other operating expenses are prepaid by \$300
- The allowance for doubtful debts is to be adjusted so that it is 2% of trade receivables.
- Depreciation for the year ended 31 May Year 6 should be provided for as follows:
 - Land and buildings – 1.5% per annum on cost, using the straight-line method.
 - Equipment – 25% per annum, using the reducing balance method.

Required

Prepare Steven Chee's income statement for the year ended 31 May Year 6 and his statement of financial position as at that date.

12 Herbert

The following trial balance has been extracted from the ledger of Herbert, a sole trader, as at 31 May Year 6, the end of his most recent financial year.

Herbert

Trial balance as at 31 May Year 6

	DR	CR
	\$	\$
Land and buildings at cost	90,000	
Equipment at cost	57,500	
Accumulated depreciation (as at 1 June Year 5)		
On land and buildings		12,500
On equipment		32,500
Inventory as at 1 June Year 5	27,400	
Sales		405,000
Purchases	259,600	
Discounts allowed	3,370	
Discounts received		4,420
Wages and salaries	52,360	
Bad debts	1,720	
Loan interest	1,560	
Other operating expenses	38,800	
Trade receivables	46,200	
Trade payables		33,600
Allowance for irrecoverable debts		280
Cash in hand	151	
Bank overdraft		14,500
Drawings	28,930	
10% loan		15,600
Capital as at 1 June Year 5		94,501
	<u>612,901</u>	<u>612,901</u>

The following additional information as at 31 May Year 6 is available:

- Inventory as at 31 May Year 6 was valued at \$25,900.
- Depreciation for the year ended 31 May Year 6 has yet to be provided as follows:
 - Property – 1% using the straight-line method;
 - Equipment – 15% using the straight-line method.
- There are accrued wages and salaries of \$140.
- Other operating expenses include some prepaid expenses of \$500 and some accrued expenses of \$200.
- The allowance for irrecoverable debts should be adjusted to 5% of trade receivables as at 31 May Year 6.
- The amount for purchases includes goods valued at \$1,040 which were withdrawn by Herbert for his own personal use.

Required

Prepare Herbert's income statement for the year ended 31 May Year 6 and his statement of financial position as at that date.

13 Bell

Bell is a sole trader making up his accounts to 31 July each year.

At 31 July Year 6 the balance on the allowance for irrecoverable debts account was \$1,420. During the following financial period ending 31 July Year 7, Bell suffered a number of bad debts amounting to \$723, which he wrote off to the bad debts account.

At 31 July Year 7 Bell listed out all his receivables balances, which totalled \$32,456. After reviewing the list Bell decided that three balances - namely Lee \$230, Bee \$562 and Yee \$56 - were all doubtful and had to be allowed for as irrecoverable debts. In addition, he considered that 2% of all the remaining balances were likely to be irrecoverable and had to be provided for.

Required

Show the ledger accounts reflecting the necessary adjustments, and the relevant extracts from the financial statements.

14 Team Company financial statements

The following trial balance has been extracted from the ledger of Team Company, as at 31 December Year 5, the end of its most recent financial year.

Team Company

Trial balance as at 31 December Year 5

	DR	CR
	\$	\$
Plant and machinery at cost	920,000	
Allowance for depreciation (as at 1 January Year 5)		215,000
Inventory as at 1 June Year 5	39,000	
Sales		1,292,000
Purchases	550,000	
Share capital: Ordinary shares of \$0.50 each		120,000
Share premium		55,000
Retained earnings		103,000
Distribution expenses	116,000	
Administrative expenses	241,000	
Bad debts	23,500	
6% bonds (redeemable in Year 15)		400,000
Trade receivables	200,000	
Trade payables		73,500
Allowance for irrecoverable debts		6,000
Interest paid on bonds	12,000	
Bank	58,000	
Dividends paid	105,000	
	<u>2,264,500</u>	<u>2,264,500</u>

The following additional information as at 31 December Year 5 is available:

- (a) Inventory as at 31 December Year 5 was valued at \$35,000.
- (b) Depreciation on plant and machinery for the year ended 31 December Year 5 is to be provided at the rate of 10% of cost.
- (c) There are accrued distribution expenses of \$7,500 and prepaid administrative expenses of \$4,000.
- (d) The allowance for irrecoverable debts should be adjusted to 2% of trade receivables as at 31 December Year 5
- (e) Tax on profits for the year to 31 December Year 5 will be estimated as 30% of the profit before tax.

Required

Prepare the income statement of Team Company for the year ended 31 December Year 5 and its statement of financial position as at that date.

You are not required to present these statements in a format suitable for publication.

15 Blot Company

The following income statement has been prepared for Blot Company for the year ended 30 June Year 6. The statement has been prepared as internal information for management.

	\$000		\$000
Opening inventory	78	Sales	2,282
Purchases	1,055	Sales returns	(66)
Purchase returns	(25)		
Gross profit c/d	1,170	Closing inventory	62
	<u>2,278</u>		<u>2,278</u>
Wages and salaries	160	Gross profit b/d	1,170
Office expenses	236	Dividends received	20
Depreciation:			
Plant and machinery	84		
Delivery vans	48		
Office furniture	17		
Directors' salaries	163		
Selling expenses	95		
Rent of plant and machinery	21		
Factory expenses	109		
Legal expenses	25		
Interest charges	70		
Net profit c/d	162		
	<u>1,190</u>		<u>1,190</u>
Taxation on profits	54	Net profit b/d	162
Net profit after tax	116	Tax over-provided in the previous year	8
	<u>170</u>		<u>170</u>

Additional information:

- (1) Directors salaries are all classified as administrative expenses.
- (2) Other wages and salaries are apportioned 70% to distribution costs and 30% to administrative expenses.

Required

Using this information, prepare an income statement for Blot Company for the year to 30 June Year 6 in a form suitable for publication, in conformity with International Accounting Standard IAS 1. Use the function of expenditure method.

16 SAW Company

SAW Company is a limited liability company with authorised share capital of \$300,000, consisting of ordinary shares of \$0.50 each. The company's financial year end is on 31 December, and a trial balance has been extracted as at 31 December Year 5, as follows, after the profit for the year has been established:

	Debit	Credit
	\$000	\$000
Ordinary share capital, issued and fully paid		200
Share premium		250
Inventory at 31 December Year 5	31	
Trade receivables and prepayments	98	
Trade payables and accruals		34
Bank	14	
Land and buildings at cost	810	
Accumulated depreciation on buildings (31 December Year 5)		60
Plant and machinery at cost	527	
Accumulated depreciation on plant and machinery (31 December Year 5)		156
7% Loan notes		200
Dividends paid	52	
Bank loan (repayable in 3 years)		120
Retained earnings at 1 January Year 5		405
Profit before tax for the year		107
	1,532	1,532

Additional information:

- (1) The loan notes are repayable in four equal annual amounts, between 30 November Year 6 and 30 November Year 9.
- (2) The tax payable on profits for the year is \$32,000. This has not yet been included in the accounts.
- (3) The directors of the company have proposed a final dividend for the year of \$40,000. The dividend was proposed after 31 December Year 5.

Required

Prepare the statement of financial position of the company as at 31 December Year 5, in a form suitable for publication in accordance with International Accounting Standard IAS 1.

17 King Company

The following information has been extracted from the financial statements of King Company for the year ended 31 December Year 6.

	\$
Sales	905,000
Cost of sales	(311,000)
Gross profit	594,000
Loss on disposal of non-current asset	(9,000)
Wages and salaries	(266,000)
Other expenses (including depreciation \$46,000)	(193,000)
	126,000
Interest charges	(24,000)
Profit before tax	102,000
Tax on profit	(38,000)
Profit after tax	64,000

The asset disposed of had a net book value of \$31,000 at the time of the sale.

Extracts from the statements of financial position:

	At 1 January Year 6	At 31 December Year 6
	\$	\$
Trade receivables	157,000	173,000
Inventory	42,000	38,000
Trade payables	43,600	35,700
Accrued wages and salaries	4,000	4,600
Accrued interest charges	11,200	10,000
Tax payable	45,000	41,000

Required

Present the cash flows from operating activities as they would be presented in a statement of cash flows:

- (a) using the direct method
- (b) using the indirect method.

18 Dove statement of cash flows

The following information has been extracted from the draft financial information of Dove.

Income statement for the year ended 31 December Year 5

	\$000	\$000
Sales revenue		490
Administration costs	(86)	
Distribution costs	(78)	
		(164)
Operating profit		326
Interest payable		(23)
Profit before tax		303
Taxation		(87)
Profit after tax		216
Other information		
Dividends paid		52
Retained profit for the year		164

Statements of financial position

	31 December Year 5		31 December Year 4	
	\$000	\$000	\$000	\$000
Non-current assets (see below)		1,145		957
Current assets:				
Inventory	19		16	
Receivables	38		29	
Bank	19		32	
		76		77
Total assets		1,221		1,034
Share capital		323		232
Revaluation reserve		170		0
Retained earnings		553		389
		1,046		621
Non-current liabilities:				
Long-term loans		70		320
Current liabilities:				
Trade payables	12		17	
Tax payable	93		76	
		105		93
Total equity and liabilities		1,221		1,034

Note on non-current assets

	Land and buildings	Machinery	Fixtures and fittings	Total
	\$000	\$000	\$000	\$000
Cost or valuation				
At 31 December Year 4	830	470	197	1,497
Additions	-	43	55	98
Disposals	-	(18)	-	(18)
Adjustment on revaluation	70	-	-	70
At 31 December Year 5	900	495	252	1,647
Depreciation				
At 31 December Year 4	(90)	(270)	(180)	(540)
Charge for the year	(10)	(56)	(8)	(74)
Disposals	-	12	-	12
Adjustment on revaluation	100	-	-	100
At 31 December Year 5	0	(314)	(188)	(502)
Net book value:				
At 31 December Year 4	740	200	17	957
At 31 December Year 5	900	181	64	1,145

You have been informed that included within distribution costs is \$4,000 relating to the loss on a disposal of a non-current asset.

Required

Prepare a statement of cash flows for Dove for the year ended 31 December Year 5 in accordance with IAS 7.

19 Hart statement of cash flows

The directors of Hart have presented you with the following summarised final accounts:

Statements of financial position

	31 December Year 5		31 December Year 6	
	\$000	\$000	\$000	\$000
Non-current assets:				
Plant and machinery at cost		2,700		3,831
Accumulated depreciation		(748)		(1,125)
Carrying amount		1,952		2,706
Current assets:				
Inventory	203		843	
Receivables	147		184	
Bank	51		-	
		401		1,027
Total assets		2,353		3,733
Ordinary share capital (\$1 shares)		740		940
Share premium account		0		100
Retained earnings		671		1,034
		1,411		2,074

Non-current liabilities:			
Loans	320		150
Current liabilities:			
Bank overdraft	0	766	
Trade payables and accruals	152	141	
Current taxation	470	602	
	<u>622</u>		<u>1,509</u>
Total equity and liabilities	<u>2,353</u>		<u>3,733</u>

Income statement for year ended 31 December Year 6

	\$000
Profit before tax	1,195
Taxation	<u>(602)</u>
Profit after tax	<u>593</u>

Dividend payments during the year were \$230,000.

The following information is also available:

- (1) The only new loan raised during the year was a five-year bank loan amounting to \$65,000.
- (2) Interest charged during the year was \$156,000. Interest accrued was \$24,000 last year and \$54,000 this year.
- (3) Depreciation charged during the year amounted to \$401,000. This does not include any profit or loss on disposal of non-current assets.
- (4) During the year plant which originally cost \$69,000 was disposed of for \$41,000.
- (5) During the year the company issued 200,000 new shares.

Required

Prepare a statement of cash flows for Hart.

20 Miss Ringer

Miss Ringer is a sole trader. She does not keep a full set of accounting records but does keep some records of transactions and documents. She has asked you to prepare her accounts for the year ended 31 December Year 3.

You have been given a list of the assets and liabilities of the business at the start and end of the year.

Assets and liabilities

	At 1 Jan Year 3	At 31 Dec Year 3
	\$	\$
Trade receivables	5,500	6,100
Trade payables	2,800	3,500
Inventory	10,400	?

Miss Ringer has no idea what her inventory value was at 31 December as that she did not count or value her inventory at the year end.

She has also been given you a summary of her bank statements for the year.

Summary of bank statements

		Receipts		Payments
		\$		\$
1 Jan	Balance b/d	1,620	To suppliers	42,800
Bankings		65,400	For expenses	9,300
			Living expenses	10,400
			31 Dec Balance c/d	4,520

You have also been able to gather the following information from Miss Ringer:

- (i) Miss Ringer banks her takings from the till each week but before doing so pays \$50 to her part time assistant and takes \$30 herself for living expenses. The business operates for 50 weeks each year.
- (ii) The till always has a cash float of \$100.
- (iii) The sales of the business are both cash and credit sales and are all made at a mark up of 40%.

Required:

- (a) Calculate sales for the year.
- (b) Calculate the value of the closing inventory at 31 December Year 3.

21 Faye

Faye set up a new subsidiary, Bob, on 1 January Year 3 and subscribed for all the issued \$1 ordinary shares of Bob, paying par value (\$1 per share). The draft statements of financial position of the two entities on 31 December Year 3 showed the following.

	Faye		Bob	
	\$	\$	\$	\$
Non-current assets				
Property, plant and equipment at cost	10,000		3,000	
Minus depreciation	(5,000)		(1,000)	
		5,000		2,000
Investment in subsidiary		2,000		-
		7,000		2,000
Current assets				
Inventories	12,000		4,000	
Receivables	15,000		2,000	
Cash at bank	20,000		1,000	
		47,000		7,000
		54,000		9,000

	Faye		Bob	
	\$	\$	\$	\$
Capital and reserves				
Ordinary share capital \$1 shares)	30,000		2,000	
Accumulated profits	<u>13,000</u>		<u>2,000</u>	
		43,000		4,000
Current liabilities				
Payables		<u>11,000</u>		<u>5,000</u>
		<u>54,000</u>		<u>9,000</u>

Required

Prepare a consolidated statement of financial position as at 31 December Year 3.

Q&A

Answers to practice questions

	<i>Page</i>
Recording transactions: sales, purchases and cash	
1 May transactions	435
2 June transactions	436
3 July transactions	438
Non-current assets	
4 Revaluation	439
5 Owen	440
Provisions and contingencies	
6 IAS37	442
Trial balance, correcting errors and suspense accounts	
7 Suspense	442
Control accounts and bank reconciliations	
8 Control accounts	444
9 Control account reconciliation	445

Preparing financial statements		
10	SWAN	445
11	Stephen Chee	447
12	Herbert	448
13	Bell	450
14	Team Company financial statements	451
15	Blot Company	452
16	SAW Company	453
Statements of cash flows		
17	King Company	455
18	Dove statement of cash flows	456
19	Hart statement of cash flows	457
Incomplete records		
20	Miss Ringer	459
21	Faye	460

1 May transactions

(a) Accounts in the main ledger

Capital			
	\$	May	\$
		1 Bank	2,500
Bank			
May	\$	May	\$
1 Capital	2,500	6 Rent	120
9 Trade receivables	430	12 Trade payables	790
10 Trade receivables	1,500	15 Advertising	230
		31 Rent	180
		31 Balance c/f	3,110
	<u>4,430</u>		<u>4,430</u>
1 June Balance b/f	3,110		
Purchases			
May	\$		\$
2 Trade payables	3,060		
18 Trade payables	1,530		
	<u>4,590</u>		
Sales			
	\$	May	\$
		4 Trade receivables	2,830
		21 Trade receivables	670
			<u>3,500</u>
Trade payables			
May	\$	May	\$
12 Bank	790	2 Purchases	3,060
31 Balance c/f	3,800	18 Purchases	1,530
	<u>4,590</u>		<u>4,590</u>
		1 June Balance b/f	3,800
Trade receivables			
May	\$	May	\$
4 Sales	2,830	9 Bank	430
21 Sales	670	10 Bank	1,500
		31 Balance c/f	1,570
	<u>3,500</u>		<u>3,500</u>
1 June Balance b/f	1,570		

Rent (expense)			
May		\$	\$
6	Bank	120	
31	Bank	180	
		<u>300</u>	

Advertising expenses			
May		\$	\$
15	Bank	230	

(b) Trial Balance as at 31 May Year 6

Trial balance as at 31 May		
	Debit	Credit
	\$	\$
Capital		2,500
Bank	3,110	
Purchases	4,590	
Sales		3,500
Trade payables		3,800
Trade receivables	1,570	
Rent	300	
Advertising	230	
	<u>9,800</u>	<u>9,800</u>

2 June transactions**(a) Main ledger transactions**

Date		Debit	Credit
June		\$	\$
1	Bank	6,500	
	Capital		6,500
2	Purchases	1,800	
	Trade payables		1,800
3	Trade receivables	1,340	
	Sales		1,340
4	Purchases	230	
	Bank		230
5	Motor van (asset account)	2,560	
	Bank		2,560
7	Motor expenses	120	
	Bank		120

9	Trade receivables	1,180	
	Sales		1,180
11	Purchases	3,480	
	Trade payables		3,480
13	Trade payables	250	
	Purchase returns		250
19	Sales returns	110	
	Trade receivables		110
20	Drawings	440	
	Bank		440
21	Trade payables	1,080	
	Bank		1,080
23	Bank	660	
	Trade receivables		660
25	Bank	430	
	Trade receivables		430
28	Trade payables	420	
	Purchase returns		420
29	Sundry expenses	40	
	Bank		40
30	Trade receivables	960	
	Sales		960

(b) Receivables ledger entries

Date		Debit	Credit
June		\$	\$
3	J Bird	660	
3	D Swann	250	
3	Swallow Company	430	
9	M Parrott	240	
9	Canary Company	260	
9	G Finch	680	
19	D Swann		110
23	J Bird		660
25	Swallow Company		430
30	D Swann	420	
	Canary Company	540	

(c) Payables ledger entries

Date		Debit	Credit
June		\$	\$
2	C Jones		1,800
11	C Jones		2,400
	E Davies		620
	A Evans		460
13	C Jones	250	
21	E Davies	620	
	A Evans	460	
28	C Jones	420	

3 July transactions**Workings:**

Sales tax on purchases = $\$108,100 \times (15/115) = \$14,100$.

Purchases excluding sales tax = $\$108,100 \times (100/115) = \$94,000$.

Sales tax on petty cash general expenses = $\$345 \times (15/115) = \45 .

General expenses excluding sales tax = $\$345 \times (100/115) = \300 .

Transaction		Debit	Credit
		\$	\$
1	Trade receivables	287,500	
	Sales		250,000
	Sales tax account		37,500
2	Bank	11,600	
	Sales		10,000
	Sales tax account		1,500
3	Purchases	94,000	
	Sales tax account	14,100	
	Trade payables		108,100
4	Sales tax account	11,160	
	Bank		11,160

5	Travel	240	
	Sundry expenses	300	
	Sales tax account	45	
	Petty cash account		585
6	Petty cash account	417	
	Bank		417
7	Sales returns	2,000	
	Sales tax account	300	
	Trade receivables		2,300

4 Revaluation

(a) Asset revaluation

Working: Annual depreciation = $\$(180,000 - 20,000)/10$ years = \$16,000.

Accumulated depreciation to 31 December Year 2 (= two years) = \$32,000.

Non-current asset			
	\$		\$
Balance b/f	180,000	Revaluation account	180,000
Revaluation account	240,000	Balance c/f	240,000
	<u>420,000</u>		<u>420,000</u>
Balance b'f	240,000		

Accumulated depreciation			
	\$		\$
Revaluation account	32,000	Balance b/f	32,000

Revaluation account			
	\$		\$
Non-current asset a/c	180,000	Accumulated depreciation	32,000
Revaluation reserve	92,000	Non-current asset a/c	240,000
	<u>272,000</u>		<u>272,000</u>

Revaluation reserve			
	\$		\$
		Revaluation account	92,000

Disposal calculation

Working: Annual depreciation in Year 3 = $\$(240,000 - \$0)/8$ years = \$30,000.

Net book value at the date of disposal in Year 4 = $\$240,000 - \$30,000 = \$210,000$.

	\$
Disposal value	225,000
Net book value at the date of disposal	210,000
Gain on disposal	<u>15,000</u>

	\$
Gain on disposal (reported in income statement)	15,000
Transfer from revaluation reserve	92,000
Total increase in retained earnings reserve	<u>107,000</u>

Tutorial note

The transfer of the revaluation surplus from the revaluation reserve to retained earnings is recorded in the main ledger by:

Debit: Revaluation reserve: \$92,000

Credit: Retained earnings reserve: \$92,000.

5 Owen**Tutorial note**

Owen does not keep a separate asset account for each individual lorry. This means that there is a single account for all the lorries.

Workings**Depreciation**

BOW1: Disposed of during year to 30 April Year 7; therefore no further depreciation. Accumulated depreciation at disposal date = \$9,000.

COW2: Depreciation during year to 30 April Year 7 = \$4,000.

DOW3: Disposed of during year to 30 April Year 7; therefore no further depreciation. Accumulated depreciation at disposal date = \$6,000.

FOW4: Since this lorry was written off in the year of purchase, there is no reason to make an allowance for depreciation. Instead, the loss on the write-off can be recorded as \$5,000 (\$35,000 cost less \$30,000 insurance value). See note (iii) of the question.

HOW5: Depreciation during year to 30 April Year 7 = \$8,000.

JOW6: Depreciation during year to 30 April Year 7 = \$5,000.

Total depreciation charge for the year = \$4,000 + \$8,000 + \$5,000 = \$17,000.

(a) Lorries account entries

Lorries account					
Date			Date		
1.5.Yr6	Balance b/d	68,000	31.7.Yr6	Lorries disposal a/c (BOW1)	16,000
1.8.Yr6	Cash (FOW4)	35,000	15.12.Yr6	Lorries disposal a/c (FOW4)	35,000
1.1.Yr7	Cash (HOW5)	41,000	1.4.Yr7	Lorries disposal a/c (DOW3)	31,000
1.4.Yr7	Cash (JOW6)	6,000	30.4.Yr7	Balance c/d	88,000
1.4.Yr7	Disposal account (part exchange – JOW 6 for DAB 3)	20,000			
		<u>170,000</u>			<u>170,000</u>
1.5.Yr7	Balance b/d	88,000			

(Note: The balance on the account at the end of the year represents the combined cost of lorries COW2, HOW5 and JOW6 = \$21,000 + \$41,000 + \$26,000).

Lorries disposal account					
Date			Date		
31.7.Yr6	Lorries a/c (BOW1)	16,000	31.7.Yr6	Allowance for depreciation a/c (BOW 1)	9,000
15.12.Yr6	Lorries a/c (FOW4)	35,000	31.7.Yr6	Cash (BOW1)	3,000
1.4.Yr7	Lorries a/c (DOW3)	31,000	31.12.Yr6	Cash (FOW4)	30,000
			1.4.Yr7	Allowance for depreciation a/c (DOW 3)	6,000
			1.4.Yr7	Lorries a/c - part exchange JOW 6 for DOW 3	20,000
			30.4.Yr7	Income statement - net loss on disposal of lorries	14,000
		<u>82,000</u>			<u>82,000</u>

Allowance for depreciation on lorries account					
Date			Date		
31.7.Yr6	Lorries disposal a/c (BOW 1)	9,000	1.5.Yr6	Balance b/d	23,000
1.4.Yr7	Lorries disposal a/c (DOW 3)	6,000	30.4.Yr7	Income statement - depreciation for the year	17,000
30.4.Yr7	Balance c/d	<u>25,000</u>			<u>40,000</u>
		<u>40,000</u>	1.5.Yr7	Balance b/d	25,000

(b) Statement of financial position (extract) at 30 April Year 7

Non-current assets	\$
Lorries, at cost	88,000
Less: Accumulated depreciation	<u>25,000</u>
	<u>63,000</u>

6 IAS 37

- (a) Case 1. Success in the case would result in economic benefits of \$250,000. Success is probable (50% - 95%) but not yet virtually certain. The item should therefore be reported as a contingent asset in a note to the financial statements.

Case 2. If this case is lost, there will be a liability for \$400,000. The probability of defeat in the case is 70% (100% - 30%). The existence of a liability is therefore probable, and it should be treated as an actual liability in the financial statements for the year.

Case 3. If this case is lost, there will be a liability for \$100,000. The probability of defeat in the case is 96% - 97%. The existence of a liability is therefore virtually certain, and it should be treated as an actual liability in the financial statements for the year.

Case 4. If this case is lost, there will be a liability for \$150,000. The probability of defeat in the case is 30% - 40%. The existence of a liability is therefore possible (= 5% to 50%). The item should be treated as a contingent liability, and disclosed in a note to the financial statements.

- (b) A liability exists as at the balance sheet date. It is not a contingent liability, because the company must make the required modifications. An estimate of the liability should be made, and it should be reported as a provision for the year ended 31 December Year 6. The provision will reduce the profit for the year. Since the modifications need not be made for 2 - 3 years, the company can report the item as a long-term provision (non-current liability) in the balance sheet.
- (c) IAS37 states that a provision can be made for reorganisation costs, but only in certain circumstances. There must be a detailed plan for the reorganisation, or the employees affected by the reorganisation must know that it is going to happen. These circumstances do not apply in this case. The company cannot make a provision for reorganisation costs as at the end of Year 6.

7 Suspense

Transaction	Debit	Credit
	\$	\$
1 Purchases	100	
Suspense account		100

Correction of error: purchases under-stated by \$100.

2	Suspense account	1,000	
	Telephone expenses		1,000

Correction of error: telephone expenses over-stated by \$1,000.

3	Suspense account	1,100	
	Purchase returns		550
	Sales returns		550

Correction of error. Purchase returns of \$550 incorrectly recorded as a debit entry in sales returns.

4	Equipment	2,000	
	Repairs and maintenance		2,000

Correction of error. Equipment purchase costs incorrectly recorded as repairs and maintenance expenses

5	Suspense account	450	
	Rent expenses		450

Correction of error: rent expenses over-stated by \$450.

6	Interest expense	200	
	Bank account		200

Transaction omitted from the ledger.

Suspense account			
	\$		\$
Telephone expenses	1,000	Opening balance	2,450
Purchase returns	550	(864,600 – 862,150)	
Sales returns	550	Purchases	100
Rent expenses	450		
	<u>2,550</u>		<u>2,550</u>

Tutorial notes

- (1) In the trial balance, total debits exceed total credits by \$2,450. A suspense account is therefore opened with a credit balance of \$2,450, to make the total debits and credits equal.
- (2) It helps to think about the ledger account that needs correcting first, and then make the suspense account entry as the matching debit or credit. For example, since purchases were under-stated in the purchases account, the correction must be to increase the debit side of the purchases account by \$100. The matching double entry is a credit in the suspense account.
- (3) You also need to recognise that one of the errors and the omission can be corrected without using a suspense account, because the error/omission has not made the total debits and credits unequal.

8 Control accounts

(a)

Trade payables control account					
		\$			\$
6	Bank	700	2	Purchases	4,590
7	Bank	350	9	Purchases	2,403
7	Discount received	25			
9	Purchase returns	400			
	Balance c/d	5,518			
		<u>6,993</u>			<u>6,993</u>
				Balance b/d	5,518

Trade receivables control account					
		\$			\$
3	Sales	4,953	4	Bank	723
12	Sales	1,005	4	Discounts allowed	30
			5	Bank	1,500
			10	Sales returns	270
				Balance c/d	3,435
		<u>5,958</u>			<u>5,958</u>
	Balance b/d	3,435			

(b)

Receivables ledger balances at 31 May		\$
Bailey Stores (753 – 723 – 30)		0
Fastshop (1,120 + 1,005)		2,125
Spencers (3,080 – 1,500 – 270)		1,310
Total balances		<u>3,435</u>
= Receivables control account balance: main ledger		

Payables ledger balances at 31 May		\$
Ellis (810 – 700)		110
Mendez Trading (1,305 + 753)		2,058
Gibson (375 – 350 – 25)		0
Dynasty (1,140 + 1,650 – 400)		2,390
Liners		960
Total balances		<u>5,518</u>
= Trade payables control account balance: main ledger		

9 Control account reconciliation

Error	Debit	Credit
	\$	\$
1 Supplier A account (purchases ledger)		1,850
Omission of a purchase on credit from the supplier's account.		
2 Supplier B account (purchases ledger)	2,000	
Omission of a payment in the supplier's account.		
3 Supplier C account (purchases ledger)	300	
Omission of a discount received from the supplier's account.		
4 Trade payables	1,500	
Purchase returns		1,500
Omission of a transaction from the main ledger.		
	\$	
Initial balance on the trade payables control account	79,500	
Adjust for omission of purchase returns	1,500	
Adjusted (= correct) balance on the account	<u>78,000</u>	

10 SWAN**SWAN****Income statement for the year ended 31 December Year 7**

	\$	\$
Sales I		50,261
Less: Returns inwards		<u>(240)</u>
		50,021
Opening inventory at 1 January Year 7	2,720	
Purchases less returns (see working 1)	<u>33,136</u>	
	35,856	
Carriage inwards	<u>546</u>	
	36,402	
Less: Closing inventory at 31 December	<u>(4,270)</u>	
Cost of sales		<u>(32,132)</u>
Gross profit		17,889
Salaries and wages (5,226 + 426)	5,652	
Rent (626 – 100)	526	
Depreciation, motor vans: (25% × \$2,000)	500	
Depreciation, fixtures and fittings: (5% × \$4,000)	200	

Motor vehicle expenses (see working 2)	690	
Carriage outwards	720	
Discounts allowed	65	
Discounts received	(59)	
Interest on bank overdraft and bank charges	56	
Bad debts	240	
Increase in allowance for irrecoverable debts (260 – 162)	98	
		(8,688)
Net profit		9,201

Workings

W1 Purchases less returns

	\$
Purchases in the trial balance	33,436
Less: goods taken by the owner for his own use	(180)
	33,256
Less: purchase returns	(120)
	33,136

W2 Motor vehicle expenses

	\$
Expenses in the trial balance	920
Less: cost of private motoring: (25%)	(230)
Business expense – income statement	690

W3 Drawings

	\$
Drawings in cash (trial balance)	2,459
Goods taken for private use	180
Cost of private motoring: (25%)	230
Total drawings	2,869

SWAN

Statement of financial position as at 31 December Year 7

	\$	\$
Non-current assets:		
Freehold land at cost		10,300
Motor vans at cost	2,000	
Less accumulated depreciation (500 + 500)	(1,000)	
Net book value (carrying amount)		1,000
Fixtures and fittings at cost	4,000	
Less accumulated depreciation (200 + 200)	(400)	
Net book value (carrying amount)		3,600
		14,900

Current assets:		
Inventory	4,270	
Receivables (7,009 – allowance 260)	6,749	
Prepayment (rent)	100	
Cash at bank	<u>55</u>	
		<u>11,174</u>
Total assets		<u>26,074</u>
Capital		
At 1 January Year 7		10,059
Net profit for the year		<u>9,201</u>
		19,260
Drawings (see working 3)		<u>(2,869)</u>
At 31 December Year 7		16,391
Current liabilities		
Bank overdraft	2,522	
Payables	6,735	
Accrued wages and salaries	<u>426</u>	
		<u>9,683</u>
Total capital and liabilities		<u>26,074</u>

11 Steven Chee

Steven Chee

Income statement for the year ended 31 May Year 6

	\$	\$
Sales		402,200
Opening inventory at 1 June Year 5	50,000	
Purchases less returns (250,000 – 15,000)	<u>235,000</u>	
	285,000	
Less: Closing inventory at 31 May Year 6	<u>(42,000)</u>	
Cost of sales		<u>(243,000)</u>
Gross profit		159,200
Wages and salaries (61,800 + accrual 800)	62,600	
Other operating expenses (17,700 – prepayment 300)	17,400	
Depreciation, land and buildings: (1.5% × \$120,000)	1,800	
Depreciation, equipment: (25% × (80,000 – 38,000))	10,500	
Discounts allowed	18,000	
Discounts received	<u>(4,800)</u>	
Loan interest	2,100	
Bad debts	4,600	
Increase in allowance for irrecoverable debts (see working)	<u>260</u>	
		<u>(112,460)</u>
Net profit		<u>46,740</u>

Working:

	\$
Allowance for irrecoverable debts at 31 May Year 6: (2% × 38,000)	760
Allowance for irrecoverable debts at 1 June Year 5	<u>500</u>
Increase in allowance	<u>260</u>

Steven Chee
Statement of financial position as at 31 May Year 6

Non-current assets	Cost	Accumulated depreciation	
	\$	\$	\$
Land and buildings	120,000	21,800	98,200
Equipment	80,000	48,500	31,500
	<u>200,000</u>	<u>70,300</u>	<u>129,700</u>
Current assets:			
Inventory		42,000	
Trade receivables	38,000		
Less allowance for irrecoverable debts	<u>(760)</u>		
		37,240	
Prepayment (operating expenses)		300	
Bank		1,300	
Cash in hand		<u>300</u>	
			<u>81,140</u>
Total assets			<u>210,840</u>
Capital			
At 1 June Year 5			121,300
Net profit for the year			<u>46,740</u>
			168,040
Drawings			<u>(24,000)</u>
At 31 May Year 6			144,040
Non-current liabilities			
7% long-term loan			30,000
Current liabilities			
Trade payables		36,000	
Accrued wages and salaries		<u>800</u>	
			<u>36,800</u>
Total capital and liabilities			<u>210,840</u>

12 Herbert

Herbert
Income statement for the year ended 31 May Year 6

	\$	\$
Sales		405,000
Opening inventory at 1 June Year 5	27,400	
Purchases (see working 1)	<u>258,560</u>	
	285,960	
Less: Closing inventory at 31 May Year 6	<u>(25,900)</u>	
Cost of sales		<u>(260,060)</u>
Gross profit		144,940
Wages and salaries (52,360 + accrual 140)	52,500	
Other operating expenses (see working 2)	38,500	
Depreciation, land and buildings: (1% x \$90,000)	900	
Depreciation, equipment: (15% x \$57,500)	8,625	
Carriage out	5,310	
Discounts allowed	3,370	

Discounts received	(4,420)	
Loan interest	1,560	
Bad debts	1,720	
Increase in allowance for irrecoverable debts (see working 3)	<u>2,030</u>	
		<u>(110,095)</u>
Net profit		<u>34,845</u>

Workings

W1 Purchases

	\$
Purchases in the trial balance	259,600
Less: goods taken by the owner for his own use	<u>(1,040)</u>
	<u>258,560</u>

W2 Other operating expenses

	\$
Expenses in the trial balance	38,800
Add: accrual	200
Less: prepayment	<u>(500)</u>
Expenses in the income statement	<u>38,500</u>

W3 Change in allowance for irrecoverable debts

	\$
Allowance for irrecoverable debts at 31 May Year 6: (5% x 46,200)	2,310
Allowance for irrecoverable debts at 1 June Year 5	<u>280</u>
Increase in allowance	<u>2,030</u>

Herbert

Statement of financial position as at 31 May Year 6

	Cost	Accumulated depreciation	
Non-current assets:			
	\$	\$	\$
Land and buildings	90,000	13,400	76,600
Equipment	<u>57,500</u>	<u>41,125</u>	<u>16,375</u>
	<u>147,500</u>	<u>54,525</u>	<u>92,975</u>
Current assets:			
Inventory		25,900	
Trade receivables (46,200 – 2,310)		43,890	
Prepayment (operating expenses)		500	
Cash in hand		<u>151</u>	
			<u>70,441</u>
Total assets			<u>163,416</u>
Capital			

At 1 June Year 5		94,501
Net profit for the year		<u>34,845</u>
		129,346
Drawings (28,930 + 1,040)		<u>(29,970)</u>
At 31 May Year 6		99,376
Non-current liabilities:		
10% loan		15,600
Current liabilities		
Bank overdraft	14,500	
Trade payables	33,600	
Accruals (140 wages + 200 operating expenses)	<u>340</u>	
		<u>48,440</u>
Total capital and liabilities		<u>163,416</u>

Tutorial note

In the statement of financial position, the accrued operating expenses and the prepaid operating expenses should not be set off against each other. Include the prepayment and the accrual in full in the statement of financial position.

13 Bell

Workings

Allowance for irrecoverable debts at 31 July Year 7:

	\$
Specific allowances to be made (230 + 562 + 56)	848
General allowance: 2% x \$(32,456 - 848)	<u>632</u>
Total allowance at 31 July Year 7	<u>1,480</u>

Allowance for irrecoverable debts account

Date		\$	Date		\$
			1.8.Yr6	Balance b/d	1,420
31.7.Yr7	Balance c/d (see workings)	1,480	31.7.Yr7	Income statement (increase in allowance)	60
	<u>1,480</u>			<u>1,480</u>	
			1.8.Yr7	Balance b/d	1,480

Bad debts account

Date		\$	Date		\$
	Accounts receivable	723	30.7.Yr7	Income statement (bad debts written off)	723
	<u>723</u>			<u>723</u>	

Extracts from financial statements

Income statement	\$
Bad debts written off	723
Increase in allowance for irrecoverable debts	60

Statement of financial position

Current assets:	\$
Trade receivables	32,456
Less: allowance for irrecoverable debts	(1,480)
	<u>30,976</u>

14 Team company financial statements

Team Company

Income statement for the year ended 31 December Year 5

	\$	\$
Sales		1,292,000
Opening inventory at 1 January Year 5	39,000	
Purchases	<u>550,000</u>	
	589,000	
Less: Closing inventory at 31 December Year 5	<u>(35,000)</u>	
Cost of sales		<u>(554,000)</u>
Gross profit		738,000
Administrative expenses (241,000 – 4,000 prepayment)	237,000	
Distribution expenses (116,000 + 7,500 accrual)	123,500	
Depreciation, land and buildings: (10% × \$920,000)	92,000	
Bad and doubtful debts (see working 1)	21,500	
Bond interest (6% × \$400,000)	<u>24,000</u>	
		<u>(498,000)</u>
Profit before taxation		240,000
Taxation (30% estimate)		<u>(72,000)</u>
Profit after taxation		<u>168,000</u>

Workings

W1 Bad and doubtful debts

	\$
Allowance for irrecoverable debts at 31 December Year 5: (2% × \$200,000)	4,000
Allowance for irrecoverable debts at 1 January Year 5	<u>6,000</u>
Reduction in allowance	(2,000)
Bad debts written off	<u>23,500</u>
Bad and doubtful debts expense	<u>21,500</u>

W2 Retained earnings

	\$
Retained earnings at 1 January Year 5	103,000
Profit for the year	<u>168,000</u>
	271,000
Dividends paid in the year	<u>(105,000)</u>
Retained earnings at 31 December Year 5	<u>166,000</u>

W3 Current liabilities and accruals

	\$
Trade payables in the trial balance	73,500
Taxation payable	72,000
Accrued interest (24,000 – 12,000 paid)	12,000
Accrued distribution expenses	7,500
Total payables and accruals	<u>165,000</u>

Team Company**Statement of financial position as at 31 December Year 5**

Non-current assets:	\$	\$
Plant and machinery at cost		920,000
Accumulated depreciation (\$215,000 + \$92,000)		<u>(307,000)</u>
		613,000
Current assets:		
Inventory	35,000	
Trade receivables (200,000 – 4,000 allowance)	196,000	
Prepayment	4,000	
Bank	<u>58,000</u>	
		293,000
Total assets		<u>906,000</u>
Equity and liabilities		
Share capital (ordinary shares of \$0.50 each)		120,000
Share premium		55,000
Retained earnings (see working 2)		<u>166,000</u>
Total equity		341,000
Non-current liabilities		
Bonds		400,000
Current liabilities		
Trade payables and accruals (see working 3)		<u>165,000</u>
Total capital and liabilities		<u>906,000</u>

15 Blot Company**Workings**

	Cost of sales	Distribution costs	Administrative expenses
	\$000	\$000	\$000
Opening inventory	78		
Purchases	1,055		
Purchase returns	(25)		
Closing inventory	<u>(62)</u>		
	1,046		
Wages and salaries (0:70:30)		112	48
Office expenses			236

Depreciation:			
Plant and machinery	84		
Delivery vans		48	
Office furniture			17
Directors' salaries			163
Selling expenses		95	
Rent of plant and machinery	21		
Factory expenses	109		
Legal expenses			25
	<u>1,260</u>	<u>255</u>	<u>489</u>

Blot Company**Income statement for the year ended 30 June Year 6**

	\$000
Sales revenue	2,216
Cost of sales	<u>1,260</u>
	956
Other income	20
Distribution costs	(255)
Administrative expenses	<u>(489)</u>
	232
Interest cost	<u>(70)</u>
	162
Profit before tax	
Tax	<u>(46)</u>
Profit for the year	<u>116</u>

16 SAW Company**SAW Company****Statement of financial position as at 31 December Year 5**

	\$000	\$000
Assets		
Non-current assets		
Property, plant and equipment		1,121
Current assets		
Inventory	31	
Trade receivables	98	
Cash and cash equivalents	<u>14</u>	
		<u>143</u>
Total assets		<u>1,264</u>
Equity and liabilities		
Equity		
Share capital		200
Share premium		250
Retained earnings		<u>428</u>
Total equity		878

Non-current liabilities

Loan notes	150	
Bank loan	<u>120</u>	
Total non-current liabilities		270

Current liabilities

Trade and other payables	34	
Loan notes	50	
Current tax payable	<u>32</u>	
Total current liabilities		<u>116</u>
Total equity and liabilities		<u>1,264</u>

Notes to the solution

- (1) A single figure is presented here in the statement of financial position for property, plant and equipment. Details of non-current assets (categories of assets, cost or valuation at the beginning and end of the year, accumulated depreciation and so on) must be disclosed in a note to the financial statements.

	Land and buildings	Plant and machinery	Total
	\$000	\$000	\$000
Cost or valuation	810	527	
Accumulated depreciation	<u>(60)</u>	<u>(156)</u>	
Carrying amount	<u>750</u>	<u>371</u>	<u>1,121</u>

- (2) The liability for loan notes has been divided into non-current and current liabilities. One quarter of the total liability of \$200,000 is repayable within the next 12 months.
- (3) Retained earnings are calculated as follows:

	\$
Retained earnings at 1 January Year 5	405,000
Profit for the year before tax	107,000
Tax	<u>(32,000)</u>
	480,000
Dividends paid in the year	<u>(52,000)</u>
Retained earnings at 31 December Year 5	<u>428,000</u>

The proposed final dividend is not included in the statement of financial position. It must be disclosed in a note to the financial statements.

17 King Company

Workings: direct method

Cash from sales	\$
Trade receivables at 1 January Year 6	157,000
Sales in the year	905,000
	<u>1,062,000</u>
Trade receivables at 31 December Year 6	(173,000)
Cash from sales during the year	<u>889,000</u>

Cash paid for wages and salaries	\$
Accrued wages and salaries at 1 January Year 6	4,000
Wages and salaries expenses in the year	266,000
	<u>270,000</u>
Accrued wages and salaries at 31 December Year 6	(4,600)
Cash paid for wages and salaries	<u>265,400</u>

Purchases	\$
Closing inventory at 31 December Year 6	38,000
Cost of sales	311,000
	<u>349,000</u>
Opening inventory at 1 January Year 6	(42,000)
Purchases in the year	<u>307,000</u>

Cash paid for materials supplies	\$
Trade payables at 1 January Year 6	43,600
Purchases in the year (as above)	307,000
	<u>350,600</u>
Trade payables at 31 December Year 6	(35,700)
Cash paid for materials	<u>314,900</u>

Cash paid for other expenses is the amount for expenses in the income statement after deducting the depreciation charge: \$193,000 - \$46,000 = \$147,000.

Interest and tax payments	Tax	Interest
	\$	\$
Liability at 1 January Year 6	45,000	11,200
Taxation charge/interest charge for the year	38,000	24,000
	<u>83,000</u>	<u>35,200</u>
Liability at 31 December Year 6	(41,000)	(10,000)
Tax paid/interest paid during the year	<u>42,000</u>	<u>25,200</u>

Statement of cash flows: direct method	\$
Cash flows from operating activities	
Cash receipts from customers	889,000
Cash payments to suppliers	(314,900)
Cash payments to employees	(265,400)
Cash paid for other operating expenses	<u>(147,000)</u>

Cash generated from operations	161,700
Taxation paid	(42,000)
Interest charges paid	(25,200)
Net cash flow from operating activities	94,500

Statement of cash flows: indirect method \$

Cash flows from operating activities	
Profit before taxation	102,000
Adjustments for:	
Depreciation and amortisation charges	46,000
Loss on disposal of non-current asset	9,000
Interest charges in the income statement	24,000
	181,000
Increase in receivables (173,000 – 157,000)	(16,000)
Decrease in inventories (42,000 – 38,000)	4,000
Decrease in trade payables (43,600 + 4,000) – (35,700 + 4,600)	(7,300)
Cash generated from operations	161,700
Taxation paid	(42,000)
Interest charges paid	(25,200)
Net cash flow from operating activities	94,500

18 Dove statement of cash flows

Dove

Statement of cash flows for the year ended 31 December Year 5

	\$000	\$000
Cash flows from operating activities		
Profit before taxation	303	
Adjustments for:		
Depreciation	74	
Interest charges in the income statement	23	
Losses on disposal of non-current assets	4	
	404	
Increase in receivables (38 – 29)	(9)	
Increase in inventories (19 – 16)	(3)	
Decrease in trade payables (17 – 12)	(5)	
Cash generated from operations	387	
Taxation paid – working 1	(70)	
Interest charges paid	(23)	
Net cash flow from operating activities		294
Cash flows from investing activities		
Purchase of non-current assets	(98)	
Proceeds from sale of non-current assets (see working 2)	2	
Net cash used in (or received from) investing activities		(96)
Cash flows from financing activities		
Proceeds from issue of shares (323 – 232)	91	
Repayment of loans (320 – 70)	(250)	
Dividends paid to shareholders	(52)	

Net cash used in (or received from) financing activities	<u>(211)</u>
Net increase/(decrease) in cash and cash equivalents	(13)
Cash and cash equivalents at beginning of the year	<u>32</u>
Cash and cash equivalents at the end of the year	<u>19</u>

Workings

W1: Taxation paid	\$000
Taxation payable at the beginning of the year	76
Tax charge for the year (income statement)	<u>87</u>
	163
Taxation payable at the end of the year	<u>(93)</u>
Therefore tax paid during the year	<u>70</u>

W2: disposal of machinery	\$000
Cost of machinery disposed of	18
Accumulated depreciation on machinery disposed of	<u>(12)</u>
Net book value at disposal	6
Loss on disposal	<u>4</u>
Therefore cash received from the disposal	<u>2</u>

19 Hart statement of cash flows

Hart

Statement of cash flows for the year ended 31 December Year 6

	\$000	\$000
Cash flows from operating activities		
Profit before taxation	1,195	
Adjustments for:		
Depreciation	401	
Loss on sale of plant (W1)	4	
Interest charges in the income statement	<u>156</u>	
	1,756	
Increase in receivables (184 – 147)	(37)	
Increase in inventories (843 – 203)	(640)	
Decrease in trade payables (W2)	<u>(41)</u>	
Cash generated from operations	1,038	
Taxation paid (W3)	(470)	
Interest charges paid (W4)	<u>(126)</u>	
Net cash flow from operating activities		442
Cash flows from investing activities		
Purchase of non-current assets (W1)	(1,200)	
Proceeds from sale of non-current assets (see working 2)	<u>41</u>	

Net cash used in (or received from) investing activities		(1,159)
Cash flows from financing activities		
Proceeds from issue of shares (W5)	300	
Bank loan raised	65	
Repayment of loans (W6)	(235)	
Dividends paid to shareholders	(230)	
Net cash used in (or received from) financing activities		(100)
Net increase/(decrease) in cash and cash equivalents		(817)
Cash and cash equivalents at beginning of the year		51
Cash and cash equivalents at the end of the year		(766)

Workings

W1: Gain or loss on disposal	\$	
Cost of asset disposed of	69	
Accumulated depreciation on asset disposed of	24	
Carrying amount at date of disposal	45	
Disposal proceeds	41	
Therefore loss on disposal	4	
W2: Increase or decrease in trade payables	\$	\$
Trade payables and accruals at 31 December Year 6		141
Less accrued interest		(54)
		87
Trade payables and accruals at 31 December Year 5	152	
Less accrued interest	(24)	
		128
Decrease in trade payables and accruals		41

Tutorial note

The accrued interest is removed from the figures because accrued interest is relevant to the amount of interest paid in the year. This is a separate item in the statement of cash flows.

W3: Taxation paid	\$
Current taxation liability at 31 December Year 5	470
Taxation charge in the year	602
	1,072
Current taxation liability at 31 December Year 6	(602)
Therefore taxation paid in the year	470
W4: Interest paid	\$
Accrued interest liability at 31 December Year 5	24
Interest charge in the year	156
	180
Accrued interest liability at 31 December Year 6	(54)
Therefore interest paid in the year	126

W5: Proceeds from the issue of shares		\$	\$
Ordinary share capital at 31 December Year 6			940
Share premium at 31 December Year 6			<u>100</u>
			1,040
Ordinary share capital at 31 December Year 5	740		
Share premium at 31 December Year 5	<u>0</u>		
			740
Proceeds from the issue of shares			<u>300</u>
W6: Loans repaid		\$	
Loans at 31 December Year 5	320		
New loan during the year	<u>65</u>		
			385
Loans at 31 December Year 6	<u>(150)</u>		
Therefore loans repaid during the year	<u>235</u>		

20 Miss Ringer

(a)

Cash account			
	\$		\$
Opening balance	100	Bankings	65,400
		Wages (50 × \$50)	2,500
		Drawings (50 × \$30)	1,500
Cash takings (balancing figure)	<u>69,400</u>	Closing balance	<u>100</u>
	<u>69,500</u>		<u>69,500</u>

Total receivables account			
	\$		\$
Balance b/d	5,500	Cash takings	69,400
Sales (balancing figure)	<u>70,000</u>	Closing balance	<u>6,100</u>
	<u>75,500</u>		<u>75,500</u>

(b)

Sales (part a)	=	\$70,000
Cost of sales	=	\$70,000 × 100/140
	=	\$50,000

Total payables account			
	\$		\$
Payments to suppliers	42,800	Opening balance	2,800
Closing balance	<u>3,500</u>	Purchases (balancing figure)	<u>43,500</u>
	<u>46,300</u>		<u>46,300</u>

Cost of sales		\$
Opening inventory		10,400
Purchases		<u>43,500</u>

	53,900
Less: closing inventory (balancing figure)	(3,900)
Cost of sales (see workings above)	<u>50,000</u>

Value of closing inventory = \$3,900

21 Faye

Consolidated statement of financial position as at 31 December Year 3

	\$	\$
Non-current assets		
Property, plant and equipment at cost (10,000 + 3,000)	13,000	
Minus depreciation (5,000 + 1,000)	<u>(6,000)</u>	
		7,000
Current assets		
Inventories (12,000 + 4,000)	16,000	
Receivables (15,000 + 2,000)	17,000	
Cash at bank (20,000 + 1,000)	<u>21,000</u>	
		54,000
		<u>61,000</u>
Capital and reserves		
Ordinary share capital \$1 shares)	30,000	
Consolidated accumulated profits (13,000 + 2,000)	<u>15,000</u>	
		45,000
Current liabilities		
Payables (11,000 + 5,000)		<u>16,000</u>
		<u>61,000</u>



Index

20% or more rule 393

A

Accounting policies for inventory 116
Account balances 74
Accounting equation 55
Accounting estimates 292
Accounting for depreciation 130
Accounting for discounts received and discounts allowed 82
Accounting for dividends 229
Accounting for non-current intangible assets 157
Accounting for revaluation 145
Accounting for sales tax 89
Accounting regulation 33
Accounting standards 33
Accounting treatment of liabilities 196
Accounting treatment of sales tax 90
Accounts 62
Accruals basis 45
Accruals concept 166
Accrued expense 46, 167
Accrued expenses and prepayments 176
Accrued income and prepaid income 177
Accumulated depreciation 129
Acid test ratio 412
Acquired intangible assets 364
Acquisition costs 359

Acquisition of tangible non-current assets 137
Adjusting event 298
Aged receivables analysis 186
Amortisation of development expenditure 160
Analysis columns 98
Analysis of expenses 289
Asset turnover ratio 405
Assets 25, 205
Associate 392
Authorised share capital 217
AVCO 118
Average time for holding inventory 408
Average time to collect 407
Average time to pay suppliers 408

B

Bad and doubtful debts: summary of the rules 186
Bad debt recovered 186
Bad debts 86, 180
 writing off 181
Balance sheet 24, 27
 simple representation 55
Bank account 69
Bank reconciliation statement: format 268
Bank reconciliations 267
Bank statements 267
Bargain purchases 362

Bonus issue	220, 222	Changes in accounting policy	292
advantages and disadvantages	223	Closing balance	74
Bookkeeping	61, 62	Closing inventory	104
system	16	Closing off an account	74
Bookkeeping rules for depreciation	130	Common reporting date	354
Books	19	Companies and financial reporting	213
Books of original entry	62	Company - limited liability company	17
Books of prime entry	62, 95	Company's financial statements	284
Borrowing money	56	Comparability	42
Business documents	50	Completeness	42
Business entity concept	44, 55	Components of equity	233
Business equation	60	Comprehensive income	25, 288
Business structure	16	Consolidated financial statements	351
Business transactions	50, 55	Consolidated income statement	376
Buying assets on credit	57	Consolidated statement of comprehensive income	376
		Contingent assets	203
		Contingent liabilities	203
		Contingent liabilities and contingent assets: recognising	204
		Contingent liabilities and contingent assets: the accounting rules	204
		Continuous inventory method	108
		Continuous inventory system	105
		Contra entries	87
		Control	350
		Control account	260, 265
		Control account reconciliation	262
		Conversion costs	114
		Corporate governance	35
		Correcting errors	243, 260
		Cost	113
		Cost and benefit	43
		Cost formulas for inventory	115
		Cost of acquisition	360
		Cost of non-current assets: cost	127
		Cost of sales	104
		Cost/sales ratios	404
		Creative accounting	418
		Credit	80
		Credit balances for receivables	264
		Credit note	52, 99
		Credit sales	51
		Credit sales, cost of sales and profit	58
		Current and non-current items	279
		Current assets	26, 126, 285
		Current liabilities	26
		Current ratio	411
		Cut-off	282

C

Cadbury Report	35
Called-up share capital	217
Capital and revenue expenditure	127
Capital expenditure	31
Capital items	31
Capital receipts	32
Capital reserves	218
Capitalisation	31
Capitalisation issue	222
Carriage inwards	115
Carriage outwards	115
Carrying amount	129
Cash account	69
Cash and cash equivalents	305
Cash book	62, 267
cash receipts	95
recording payments	96
Cash discounts	82
Cash equivalents	306
Cash flow statement: purpose	305
Cash flow statements	304
Cash in the statement of financial position	272
Cash operating cycle	409
Cash payment to settle a liability	57
Cash sales	51
Cash sales, cost of sales and profit	57
Categories of financial ratios	400
Changes in accounting estimates	292

D

Days sales outstanding	407
Debit and credit entries	67
Debit balances for payables	264
Debit note	53
Debt ratios	413
Deferred income	47
Definition of an associate	392
Delivery note	51
Depreciable amount	129
Depreciation	128, 129
methods	134
purpose	133
Depreciation as a percentage of cost	135
Depreciation method	153
Depreciation of a re-valued asset	148
Development	159
Development costs	160
Development expenditure	159
Development expenditure as an intangible asset	160
Direct method	308, 319
Directly-related acquisition costs	359, 360
Discount allowed	82, 83, 86, 96
Discount received	82, 83
Discounts	81
Disposal of a re-valued non-current asset: gain or loss on disposal	151
Disposal of non-current assets	139
Dividends	59, 225, 227, 295
Double entry accounting system	241
Double entry book-keeping	67
Doubtful debts	180, 189
creating or increasing an allowance	183
reducing an allowance	183
Doubtful debts: making an allowance	182
Drawings	59, 214
Dual nature of transactions	61
Duality concept	61
Duties and responsibilities of directors and others	36

E

End-of-year adjustments for inventory	104
Entity	16
Equity	26, 216, 285
dividends	227

method	394
shares	216
Errors	241
of commission	241
of omission	241
of principle	241
of transposition	241
Events after the balance sheet date	298
Events after the balance sheet date: the accounting rules (IAS 10)	299
Expenses	28
by their function	290
by their nature	290

F

Fair value adjustments	367
Fair value formula	372
Fair value method of accounting for NCI	366, 372
Faithful representation	41
FIFO	117
Final dividend	228
Financial accounting	16
Financial information - qualities	40
Financial statements	24
users	21
Financial transactions: effect on the accounting equation	55
Financing activities	329
First-in, first-out method (FIFO)	117
Framework for the Preparation and Presentation of financial Statements	20

G

Gain on disposal	138
Gain or loss on disposal	138
Gearing ratio	413
General ledger	62
Going concern basis	47
Goods received note	53
Goodwill	157, 360
Goodwill attributable to NCI	372, 374
Gross profit	29
percentage	343

ratio	405
Group accounts	352

H

High-gear	413
Holding company	351

I

IAS 1 <i>Presentation of financial statements</i>	284, 285
IAS 2 <i>Inventories</i>	111, 115
IAS 7 <i>Statements of cash flows</i>	304
IAS 8 <i>Accounting policies, changes in accounting estimates and errors</i>	291
IAS 10 <i>Events after the balance sheet date</i>	298
IAS 16 <i>Property, plant and equipment</i>	126, 129, 137, 145, 153
IAS 28 <i>Investments in associates</i>	392
IAS 37 <i>Provisions, contingent assets and contingent liabilities</i>	197
IAS 38 <i>Intangible assets</i>	126, 158, 159
IASB	34
IASB Framework	25, 26
IASB Framework for the preparation and presentation of financial statements	21
IASC Foundation	33
IFRIC	34
IFRS 3 (revised)	372
Imprest system	100
Income	28
Income statement	25, 27, 29, 288
and the balance sheet: links	60
Incomplete records	
dealing with	336
meaning	336
nature	336
techniques	337, 402
Increasing a provision	199
Indirect method	307
Indirect method	
adjustments for working capital	313
Intangible assets	157
Interest cover ratio	414
Interest paid	311

Interim dividend	228
International Accounting Standards (IASs)	33, 34
International Accounting Standards Board (IASB)	33
International Accounting Standards Committee (IASC)	21
International Financial Reporting Interpretations Committee (IFRIC)	33
International Financial Reporting Standards (IFRSs).	34
Intra-group balances	384
Intra-group sales	383
Intra-group transactions	382
Inventory	26
and drawings	116
Inventory count	109
Inventory turnover	408
Investing activities	324
Investors	21
Irredeemable preference shares	226
Issued share capital	217

J

Journal	63
Journal entries	72, 253

L

Ledger accounting system	16
Ledgers	19, 62
Lenders	22
Leverage	413
Liabilities	26
non-current or current	285
Liability	196
Limitations of interpretation techniques	416
Limited liability	212
Limited liability companies	212
Limited liability company:	
advantages and disadvantages	213
Liquidity ratios	411
Loan capital	231
Loan notes	231
Loss on disposal	138

Lower of cost or net realisable value	111
Low-geared	413

M

Main ledger	62, 63, 64, 65, 86
Maintenance and repair costs	128
Mark-up percentage	343
Matching concept	45, 166
Materiality	40
Materials valuation methods and inflation	120
Measurement of inventory	111
Memorandum cash and bank account	340
Memorandum control accounts	338
Minority interest	365
Missing inventory figure	344
Money measurement concept	45

N

Nature of expenses	289
NCI and goodwill	366
Negative goodwill	362
Net book value (carrying amount)	129
Net profit	29
Net profit ratio	405
Net realisable value	112
Net realisable value (NRV)	111
Neutrality	41
Nominal ledger	62
Nominal value	217
Non-adjusting event	298
Non-controlling interest in the consolidated income statement	379
Non-controlling interests	365
Non-current asset register	26, 31, 126, 285, 137
Non-current liabilities	26
Non-financial information	420
Notes to the financial statements	25

O

Off balance sheet finance	418
---------------------------	-----

Opening and closing balances	74
Opening and closing inventory	104
Opening and closing net assets	345
Opening balance	74
Opening capital	337
Operational cash flows	309, 319
Outstanding lodgements	268
Overdraft balances	270
Over-estimate or under-estimate of tax	293
Owners' capital	25

P

Paid-up share capital	217
Parent entity	350
Part-exchange of an old asset	142
Partnership	17
Payables ledger	62, 87
Payables ledger control account	190, 260
Paying cash to buy another asset	56
Percentage annual growth in sales	406
Period-end inventory method	105
Period-end method	105
Periodic weighted average cost	120
Petty cash definition	100
Petty cash book	63
Post-acquisition profits	357
Posting payments from the cash book	96
Posting receipts	95
Posting transactions	63
Pre- and post-acquisition profits	377
Pre-acquisition profits	357
Preference dividends	227
Preference shares	216, 225
Prepaid expenses prepayments	166, 172
Prepayment	46
Prior period errors	292
Profit and cash flow	304
Profit/sales ratio	404
profitability and asset utilisation	404
Proposed dividends	287, 299
Proposed final dividend	229, 295
Provisions	196
Prudence	41
Purchase cost	113

Purchase invoice	53
Purchase order	53
Purchase returns	53, 80
Purchase transactions	53
Purchased goodwill	360
Purchases	80
Purchases day book	62, 97
Purchases of inventory	70
Purchases on credit	80
Purchases returns day book	62, 99
Purpose of financial ratio analysis	400

Q

Quality of financial statements	42
Quick ratio	412
Quotation	53

R

Realisation concept	45
Receivables	26, 180
Receivables days	407
Receivables ledger	62, 63, 64, 85
Receivables ledger control account	188, 260
Recognition and measurement of provisions	200
Reconciliation	260, 262, 267
Reconciliation of a statement with the supplier's ledger account	265
Redeemable preference shares	226
Reducing a provision	199
Reducing balance method	135
Regulatory system for financial accounting	33, 35
Related party transaction	419
Relevance	40
Reliability	40
Research	159
Research and development expenditure	159
Research costs	159
Reserves	216, 218
Residual value	129
Restructuring costs	369
Retail method	115
Retained earnings	59

Return on capital employed	402
Return on shareholder capital	403
Revaluation - book-keeping entries	146
Revaluation model	150
Revaluation of non-current assets	145
Revaluation reserve	151
account	145
Revenue expenditure	31
Revenue income	32
Revenue items	31
Revenue reserves	218
Rights issues	220
advantages and disadvantages	221

S

Sales	80
Sales day book	62, 97
Sales invoices	51
Sales on credit	80, 180
Sales order	51
Sales returns	52, 80
Sales returns day book	62, 99
Sales tax	89, 98
account	91
Sales tax and discounts	93
Sales tax arithmetic	91
Sales transactions	51
Sales/capital employed ratio	405
Sarbanes-Oxley Act	36
Setting up a business	56
Settlement discounts	82
Settlement discounts received	96
Settlement of a provision	198
Share capital	216, 217
Share premium account	219
Significant influence	392
Simple income statement	28
Sole trader	16
Sole trader's financial statements	276
Sole traders	212
Standards Advisory Council (SAC)	33, 34
Statement of cash flows	25
Statement of changes in equity	25, 229, 233
Statement of comprehensive income	25, 287
Statement of financial position	24, 25, 27
format	284

Statements	52
Straight-line method	134
Subsidiary	350
Substance over form	41
Supplier statements	265
Suspense account	248

T

T accounts	67
Tangible and intangible assets	126
Tax authorities	90
Tax collectors	89
Tax paid	311
Taxation in the balance sheet	294
Taxation in the income statement	293
Taxation on profits	293
Timeliness	43
Timing differences	268
Total comprehensive income	288
Trade discount	81
Trade payables	26
Transactions between the year-end and the inventory count	109
Transactions with owners in their capacity as owners	234
Trial balance	74, 240, 248
Trial balance to income statement	276
True and fair view/faithful representation	43

U

Understandability	40
Uniform accounting policies	354
Unknown entry	252
Unpresented cheques	268
Unrealised profit in inventory	387
Useful life	129
Users: of financial statements needs	400

V

Valuation of inventory	111
Value added tax	89
VAT	51
Vertical format	27, 28

W

Weighted average cost	115
Weighted average cost (AVCO) method	118
Window dressing	418
Working capital	280
adjustments	311
cycle	409
efficiency ratios	407



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