



Profit & Loss Lemonade Stand Income and Expense Information

Income:

- total cups of lemonade sold 20
- selling price per cup \$.50

Expenses:

- Ready made ½ gallon cartons of lemonade (10 cups per carton) \$1.50 each
- Lemonade Powder (20 cups per can) \$1.50 each
- Water (use tap water) \$ 0
- Cups (100 in a package) \$.99
- Spoon or spatula (use one from home) \$ 0
- Container (use from home) \$ 0
- Poster board \$.79
- Marker \$.59
- Tape \$.59
- Table (use from home) \$ 0



Profit & Loss

Lemonade Stand P&L Statements

Calculate gross income, total expenses, net income (profit), and profit margin %s for each P&L statement below.

	P&L #1	P&L #2	P&L #3	P&L #4	P&L #5
Cups sold	20	20	20	20	20
Selling Price	\$.50	\$.50	\$.50	\$.50	\$.60
Gross Income	\$	\$	\$	\$	\$
Ready-made lemonade	\$ 3.00	\$ 3.00	\$ 3.00	\$ 0	\$ 0
Powered lemonade	\$ 0	\$ 0	\$ 0	\$ 1.50	\$ 1.50
Cups	\$.99	\$.99	\$ 0	\$ 0	\$ 0
Poster board	\$.79	\$.79	\$ 0	\$ 0	\$ 0
Marker	\$.59	\$ 0	\$ 0	\$ 0	\$ 0
Tape	\$.59	\$ 0	\$ 0	\$ 0	\$ 0
Total Expenses	\$	\$	\$	\$	\$
Net Income (Profit)	\$	\$	\$	\$	\$
Profit Margin %	%	%	%	%	%
Assumptions:	High expenses	Reduce some expenses	Reduce more expenses	Switch from ready-made to powder	Increase selling price by \$.10/cup
Cartons of ready-made lemonade	2	2	2	0	0
Cans of powdered lemonade	0	0	0	1	1
Packages of cups	1	1	Use from home	Use from home	Use from home
Poster board	1	1	Use paper from home	Use paper from home	Use paper from home
Marker	Purchase	Use from home	Use from home	Use from home	Use from home
Tape	Purchase	Use from home	Use from home	Use from home	Use from home



Profit & Loss Lemonade Stand P&L Statements - Key

	P&L #1	P&L #2	P&L #3	P&L #4	P&L #5
Cups sold	20	20	20	20	20
Selling Price	\$.50	\$.50	\$.50	\$.50	\$.60
Gross Income	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00	\$12.00
Ready-made lemonade	\$ 3.00	\$ 3.00	\$ 3.00	\$ 0	\$ 0
Powered lemonade	\$ 0	\$ 0	\$ 0	\$ 1.50	\$ 1.50
Cups	\$.99	\$.99	\$ 0	\$ 0	\$ 0
Poster board	\$.79	\$.79	\$ 0	\$ 0	\$ 0
Marker	\$.59	\$ 0	\$ 0	\$ 0	\$ 0
Tape	\$.59	\$ 0	\$ 0	\$ 0	\$ 0
Total Expenses	\$ 5.96	\$ 4.78	\$ 3.00	\$ 1.50	\$ 1.50
Net Income (Profit)	\$ 4.04	\$ 5.22	\$ 7.00	\$ 8.50	\$ 10.50
Profit Margin %	40.4%	52.2%	70%	85%	87.5%
Assumptions:	High expenses	Reduce some expenses	Reduce more expenses	Switch from ready-made to powder	Increase selling price by \$.10/cup
Cartons of ready-made lemonade	2	2	2	0	0
Cans of powdered lemonade	0	0	0	1	1
Packages of cups	1	1	Use from home	Use from home	Use from home
Poster board	1	1	Use paper from home	Use paper from home	Use paper from home
Marker	Purchase	Use from home	Use from home	Use from home	Use from home
Tape	Purchase	Use from home	Use from home	Use from home	Use from home



Profit & Loss Lemonade Stand P&L Analysis

Answer the following questions using the Lemonade Stand P&L Statements.

- 1. Which shows more profit, P&L#1 or P&L#2?**
- 2. What is the difference in profit between P&L#1 and P&L#2?**
- 3. Why is the profit higher in P&L#2 than in P&L#1?**
- 4. Why does P&L#3 show even more profit?**
- 5. Why is P&L#4 more profitable than P&L#3? What changed?**
- 6. How did pricing in P&L#5 affect the profit?**
- 7. Which scenario would you choose to make the most profit if you kept the price per cup of lemonade at \$.50?**
- 8. Which P&L shows the highest profit margin %?**



Profit & Loss Lemonade Stand P&L Analysis - Key

Answers are based on the
Lemonade Stand P&L Statements – Key.

1. **Which shows more profit, P&L#1 or P&L#2?** P&L#2

2. **What is the difference in profit between P&L#1 and P&L#2?**

$$\$5.22 - \$4.04 = \$1.18$$

3. **Why is the profit higher in P&L#2 than in P&L#1?**

Expenses are \$1.18 less in P&L#2 than in P&L#1. There are no marker or tape expenses.

4. **Why does P&L#3 show even more profit?**

P&L#3 shows more profit because expenses are reduced even further. Cup and poster board expenses have been eliminated too. We are going to use cups and poster board that we already have at home.

5. **Why is P&L#4 more profitable than P&L#3? What changed?**

P&L#4 is more profitable than P&L#3 because we have switched from ready-made lemonade to powdered lemonade. The ready-made lemonade is more expensive. To sell 20 cups of lemonade, we need to purchase two cartons of ready-made lemonade for a total of \$3.00. To sell the same 20 cups of lemonade using powdered lemonade, we need to purchase only one can of powdered lemonade at \$1.50.

6. **How did pricing in P&L#5 affect the profit?**

In P&L#5, the price per cup increased \$.10 from \$.50 to \$.60. This increased gross income by \$2.00 (20 cups selling for \$.10 more each). Since expenses did not increase from P&L#4, the \$2.00 in additional gross income turned into all profit.

7. **Which scenario would you choose to make the most profit if you kept the price per cup of lemonade at \$.50?**

P&L#4 shows the most profit with a price of \$.50 per cup. We would have to keep expenses low and use powdered lemonade to have the most profit at this selling price.

8. **Which P&L shows the highest profit margin %?**

P&L#5 has the highest profit margin at 87.5%



Profit & Loss School Store P&L Statements

Calculate total merchandise available, cost of good sold, gross profit on sale, and gross profit margin%.

	January	February	March
INCOME FROM SALES	\$500.00	\$450.00	\$650.00

COST OF GOODS SOLD	January	February	March
Opening Merchandise Inventory	\$250.00	\$200.00	\$300.00
Plus Purchases	+\$250.00	+\$350.00	+\$175.00
Total Merchandise Available	=\$	=\$	=\$
Less Closing Merchandise Inventory	-\$200.00	-\$350.00	-\$100.00
Cost of Goods Sold	=\$	=\$	=\$

GROSS PROFIT ON SALES	January	February	March
Income from Sales	\$500.00	\$450.00	\$650.00
Cost of Goods Sold	-\$300.00	-\$200.00	-\$375.00
Gross Profit on Sale	\$	\$	\$

	January	February	March
GROSS PROFIT MARGIN %	%	%	%

1. Which month had the most income from sales? _____
2. Which month had the highest gross profit on sale? _____
3. Which month had the lowest gross profit on sale? _____
4. Which month had the highest gross profit margin %? _____
5. Which month had the lowest gross margin %? _____



Profit & Loss School Store P&L Statements - Key

	January	February	March
INCOME FROM SALES	\$500.00	\$450.00	\$650.00

COST OF GOODS SOLD	January	February	March
Opening Merchandise Inventory	\$250.00	\$200.00	\$300.00
Plus Purchases	+\$250.00	+\$350.00	+\$175.00
Total Merchandise Available	=\$500.00	=\$550.00	=\$475.00
Less Closing Merchandise Inventory	-\$200.00	-\$350.00	-\$100.00
Cost of Goods Sold	=\$300.00	=\$200.00	=\$375.00

GROSS PROFIT ON SALES	January	February	March
Income from Sales	\$500.00	\$450.00	\$650.00
Cost of Goods Sold	-\$300.00	-\$200.00	-\$375.00
Gross Profit on Sale	\$200.00	\$250.00	\$275.00

	January	February	March
GROSS PROFIT MARGIN %	40%	55.6%	42.3%

- | | |
|---|----------|
| 1. Which month had the most income from sales? | March |
| 2. Which month had the highest gross profit on sale? | March |
| 3. Which month had the lowest gross profit on sale? | January |
| 4. Which month had the highest gross profit margin %? | February |
| 5. Which month had the lowest gross margin %? | January |

Use the following summary to assess a student's abilities and performance throughout the lesson. Share this assessment with students at the start of the lesson so that students will understand how they will be assessed prior to beginning the Exploring and Learning section. Use this tool as a basis for providing feedback to the student. Use the scale below to score each of the following items:

Making Connections:

- _____ Student participates in class discussion to define profit and loss.
- _____ Student participates in discussion by offering reasons why understanding profits and losses are important.
- _____ Student works with partner to identify income and expenses for a lemonade stand.

Exploring and Learning

- _____ Student works with partner to calculate gross income, total expenses, net income (profit), and profit margin percentages for five lemonade stand P&L statements.
- _____ Lemonade Stand P&L Statements contain accurate calculations.
- _____ Student works with partner to analyze lemonade stand P&Ls using questions from the Lemonade Stand P&L Analysis.
- _____ The Lemonade Stand P&L Analysis contains accurate responses to the eight questions.
- _____ Student works with partner to calculate total merchandise available, cost of goods sold, gross profit on sale, and gross profit margin %s for school store P&L statements.
- _____ The School Store P&L Statements contain accurate calculations.
- _____ Student works with partner to analyze monthly school store P&L statements using questions from School Store P&L Statements.
- _____ The School Store P&L Statements contain accurate responses to the five questions.

SCALE

4 – Excellent

Student completes the activity, task or assignment with no errors and demonstrates mastery of concepts and/or lesson objectives.

3 – Good

Student completes the activity, task, or assignment with few major errors and demonstrates an understanding of the concepts and/or lesson objectives.

2 – Fair

Student completes the activity, task, or assignment with some major errors and demonstrates difficulty with the concepts and lesson objectives.

1 – Poor

Student does not complete the activity, task, or assignment and demonstrates no understanding of the concepts and/or lesson objectives.