This test covers material taught in Dimensions Math 2B.

1 Add using mental math.

2 Find the missing number.

3 Subtract using mental math.

4 Find the value.

5 Divide.

6 A bag of rice weighs 5 kg. How much do 8 bags of rice weigh?

8 bags of rice weigh \_\_\_\_\_ kg.

| 7 | Dion put 24 flowers equally into 4 vases.  How many flowers are in each vase?                         |
|---|---|
|   | There are flowers in each vase.   |
| 8 | A farmer has 27 lemons.  She puts them into bags of three.  How many bags of lemons are there?        |
|   | There are bags of lemons.   |
| 9 | Kona wants to put 38 candles into boxes.  Each box can hold 5 candles.  How many boxes does she need? |
|   | She needs boxes.  |

10 Add or subtract.

(a) 
$$95\phi + \phi = 100\phi$$

(b) 
$$22\phi + \phi = $1$$

(c) 
$$$1 - 57¢ =$$

Write the amount of money.

| Fifty-four cents            | \$ |
|-----------------------------|----|
| Seven dollars and ten cents | \$ |
| Eight cents                 | \$ |
| Sixty-three dollars         | \$ |

- 12 Fill in the blanks.
  - (a) \_\_\_\_\_ dimes make \$3.00.
  - (b) \_\_\_\_\_ quarters make \$3.75.
  - (c) \_\_\_\_\_ pennies make \$1.00.
  - (d) \_\_\_\_\_ nickels make 80¢.
- 13 Add or subtract.

(d) 
$$55\phi - 20\phi = \boxed{\phi}$$

| 14 | Emma has 3 quarters, 3 dimes, and 3 nickels.  Alex has a dollar bill and two dimes.  Sofia has 5 dimes, 2 pennies, and 8 quarters.  Dion has a dollar bill, one nickel, and one penny. |   |                 |                                |  |  |  |  |
|----|--|---|-----------------|--------------------------------|--|--|--|--|
|    | (a)  | Who has the most mo                     | ney?            |                                |  |  |  |  |
|    |  |   |                 |                                |  |  |  |  |
|    |  | has                                     | the most money. |                                |  |  |  |  |
|    | (b)  | Who have the same a                     | mount of money? |                                |  |  |  |  |
|    |  |   |                 |                                |  |  |  |  |
|    |  | and                                     |                 | have the same amount of money. |  |  |  |  |
|    | (c)  | Does Dion or Alex hav<br>How much less? | e less money?   |                                |  |  |  |  |
|    |  |   |                 |                                |  |  |  |  |
|    |  | has                                     | less money.     |                                |  |  |  |  |
|    |  | He has                                  | less.           |                                |  |  |  |  |

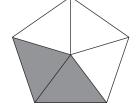
**15** Alex has \$6.00.

He buys a burrito for \$3.15 and a drink for 80 ¢.

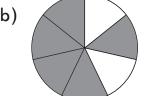
How much money does he have left?

16 What fraction of each shape is shaded?

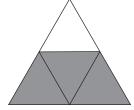
(a)



(b)

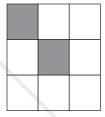


**17** (a)



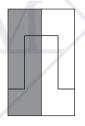
make 1 whole.

(b)



make 1 whole.

(c)



fourths make 1 half.

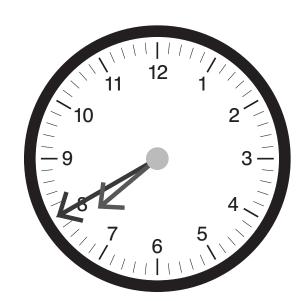
- (a) There are \_\_\_\_\_ one-fifths in  $\frac{3}{5}$ .
  - (b) There are \_\_\_\_\_ one-tenths in  $\frac{7}{10}$ .
  - (c) There are \_\_\_\_\_ one-thirds in one whole.
  - (d) Write the fraction for five-twelfths.
- 19 Write the fractions in order, beginning with the smallest fraction:
  - $\begin{array}{|c|c|c|c|c|}\hline \frac{1}{3} & \hline \frac{1}{9} & \hline \frac{1}{4} & \hline \frac{1}{8} & \hline \frac{1}{2} & \hline \end{array}$

Dion ate  $\frac{1}{7}$  of a cake. Mei ate  $\frac{1}{6}$  of the same cake. Who ate more cake?

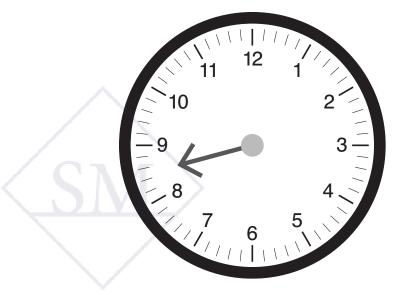
ate more cake.

- 21 Fill in the blanks.
  - (a) What time is the clock showing?

(b) Write the time in words:



- (c) It is \_\_\_\_\_ minutes to 8.
- (d) What time was it 6 hours ago? \_\_\_\_:\_\_\_:
- (e) Draw the minute hand to show what time it will be in 50 minutes.



A show started at 9:15 a.m. and lasted 45 min. What time did the show end?

A plane left Seattle and arrived in Portland at 12:40 p.m. The flight took 55 minutes.

What time did the plane leave Seattle?

24 Circle True or False.

(a) 1 liter of water can fill about 40 water glasses.
(b) A water jug can hold about 2 L of water.
(c) The capacity of a bath tub is about 20 L.
(d) A fish tank has a greater capacity than a teacup.
True False

| 25 |  |
|----|--|
| 4  |  |

This picture graph shows the number of birthday cakes sold by a bakery this week.

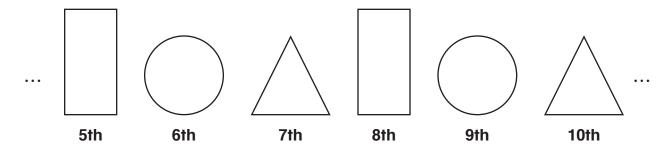
| Birthday Cakes Sold This Week |         |           |          |        |  |  |  |  |
|-------------------------------|---------|-----------|----------|--------|--|--|--|--|
|                               |         |           |          |        |  |  |  |  |
|                               |         |           |          |        |  |  |  |  |
|                               |         |           |          |        |  |  |  |  |
|                               |         |           |          |        |  |  |  |  |
|                               |         |           |          |        |  |  |  |  |
|                               |         |           |          |        |  |  |  |  |
| Monday                        | Tuesday | Wednesday | Thursday | Friday |  |  |  |  |

Each stands for 5 cakes.

- (a) How many cakes were sold on Tuesday?
- (b) On which 2 days were the same number of cakes sold?
- (c) On which day were the most cakes sold?
- (d) How many more cakes did the bakery sell on Friday than on Monday?
- (e) How many cakes were sold in the five days?

## **26** Circle True or False.

- (a) Triangles are polygons with 3 sides. True False
- (b) Rectangles are polygons with 4 sides. True False
- (c) Hexagons have 5 sides. True False
- (d) Rectangles are quadrilaterals. True False
- (e) There are 4 semicircles in a circle. True False
- (f) A fourth of a circle is called a quarter-circle. True False
- 27 Draw the 1st shape in this pattern.



- 28 Fill in the blanks.
  - (a) A cube has \_\_\_\_\_ faces that are squares.
  - (b) A cube has \_\_\_\_\_ corners.
  - (c) A cuboid has \_\_\_\_\_ edges.
  - (d) A cylinder has \_\_\_\_\_ curved surfaces.
  - (e) A cone has \_\_\_\_\_ face that is a circle.
  - (f) A sphere has \_\_\_\_\_ corners.



## **Answer Key**

- **1** (a) 76
- (b) 91
- (c) 425
- (d) 302
- (e) 231
- (f) 374

- **2** (a) 35
- (b) 71
- (c) 88
- (d) 45

- **3** (a) 28
- (b) 863
- (c) 730
- (d) 42
- (e) 103
- (f) 309

- **4** (a) 21
- (b) 36

- (c) 3
- (d) 32
- (e) 9
- (f) 4

- **5** (a) 5
- (b) 6
- (c) 8
- (d) 7
- (e) 4
- (f) 2
- 6 8 bags of rice weigh 40 kg.
- **7** There are 6 flowers in each vase.

- 8 There are 9 bags of lemons.
- 9 She needs 8 boxes.
- **10** (a) 5¢
- (b) 78¢
- (c) 43¢
- (d) 66¢
- **11** \$0.54, \$7.10, \$0.08, \$63.00
- (a) 30 dimes make \$3.00.
  - (b) 15 quarters make \$3.75.
  - (c) 100 pennies make \$1.00.
  - (d) 16 nickels make 80¢.
- **13** (a) \$2.80
- (b) \$2.90
- (c) \$8.15
- (d) 35¢
- (e) \$2.09
- (f) \$2.20
- (a) Sofia has the most money.
  - (b) Emma and Alex have the same amount of money.
  - (c) Dion has less money. He has 14¢ (or \$0.14) less.

## **Answer Key**

- \$2.05
- 16 (a)  $\frac{2}{5}$
- (b)  $\frac{5}{7}$

- (a)  $\frac{1}{4}$
- (b)  $\frac{2}{9}, \frac{7}{9}$
- (c) 2
- **18** (a) 3
- (b) 7

- (c) 3
- (d)  $\frac{5}{12}$
- 20 Mei ate more cake.
- **21** (a) 7:40
  - (c) 20
- (d) 1:40

(b) seven forty

(e)



22 10:00 a.m.

- **23** 11:45 a.m.
- **24** (a) False
- (b) True
- (c) False
- (d) True

- **25** (a) 20
  - (a) 20
  - (b) Monday and Wednesday
  - (c) Friday
- (d) 15
- (e) 105
- **26** (a) True
- (b) True
- (c) False
- (d) True
- (e) False
- (f) True





- (a) A cube has 6 faces that are squares.
  - (b) A cube has 8 corners.
  - (c) A cuboid has 12 edges.
  - (d) A cylinder has 1 curved surface.
  - (e) A cone has 1 face that is a circle.
  - (f) A sphere has 0 corners.