

Released Assessment Questions, 2017

Junior Division

Grade

6

Mathematics

Assessment of Reading, Writing and Mathematics

INSTRUCTIONS

Answering Multiple-Choice Questions

Like this: ● Not like this: ⊗ ✓ ◐ ○

- Use a pencil only.
- Fill only one circle for each question.
- Fill the circle completely.
- Cleanly erase any answer you wish to change.

Answering Open-Response Questions

- Write on the space provided in this booklet.

Education Quality and
Accountability Office



You are now ready to start.

1 What is the value of the underlined digit in $4\underline{2}5\ 380$?

- 20
- 2000
- 20 000
- 200 000

2 Which of the following lists the number of small squares used to make the next 3 figures of this growing pattern if it continues?



Figure 1

Figure 2

Figure 3

Figure 4

- 12, 16, 20
- 12, 20, 28
- 16, 20, 24
- 16, 32, 64

3 Which statement is **true** for these two rectangular-based prisms?

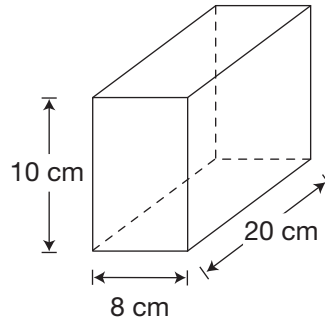


Figure 1

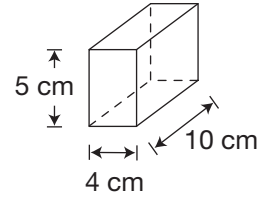
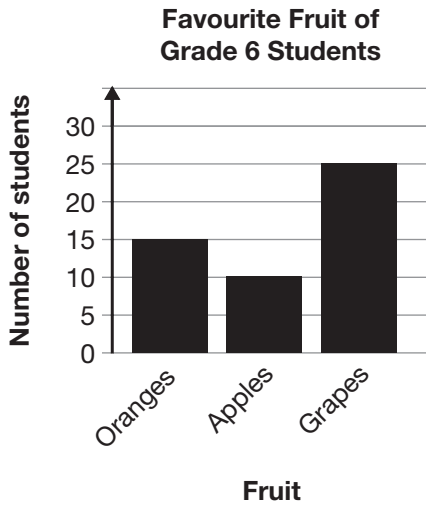


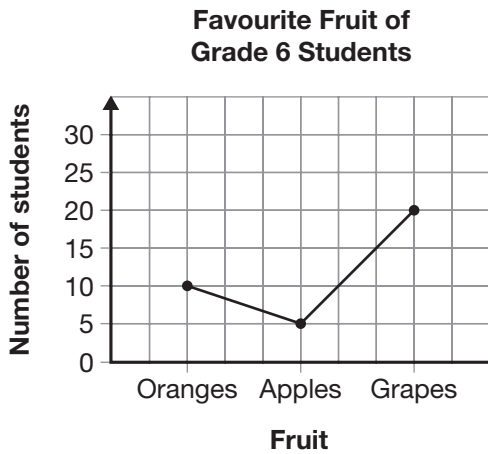
Figure 2

- Figure 1 has half the volume of Figure 2.
- Figure 1 has twice the volume of Figure 2.
- Figure 1 has four times the volume of Figure 2.
- Figure 1 has eight times the volume of Figure 2.

4 This bar graph shows data on the favourite fruits of Grade 6 students at a school.



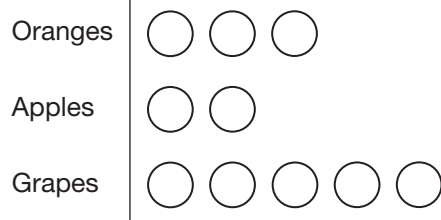
Which of these represents the same data as the bar graph?



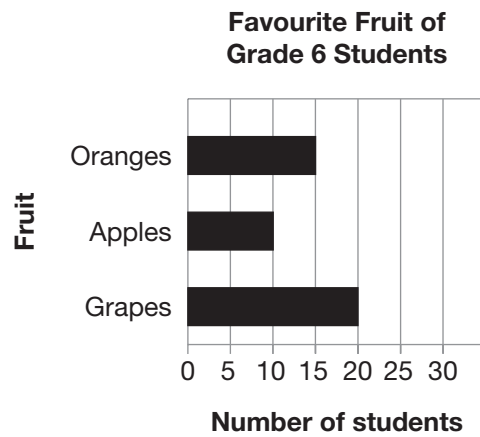
Favourite Fruit of Grade 6 Students

Stem	Leaf
1	5
2	0, 5

Favourite Fruit of Grade 6 Students



Each ○ represents 5 students.



- 5** This table shows information about some students who walk to school. The number of students for Grade 6 is missing.

Grade	Number of students
4	18
5	10
6	?
Total	65

Which is closest to the percentage of students who walk to school and are in Grade 6?

- 10%
- 25%
- 50%
- 75%

- 6** Which value of b makes the equation $b \div 4 = b - 12$ true?

- 3
- 8
- 16
- 48

7 A shape is shown.



Which is the image of the shape after it is rotated 90° counter-clockwise?

-
-
-
-

8 Three packages have masses of 0.85 kg, 9.4 kg and 23 kg.

What is the total mass of the packages in **grams**?

Show your work.

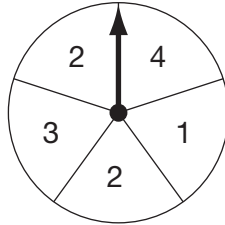
The total mass of the three packages is _____ g.

9 Which of these experiments has an outcome with a greater theoretical probability than the others?

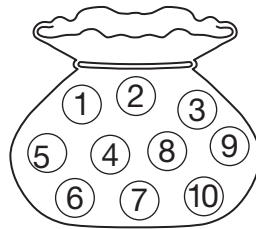
Experiment A: Rolling a 4 or greater on a number cube labelled 1, 2, 3, 4, 5, 6.



Experiment B: Spinning the arrow on this spinner and the arrow landing on an even number.



Experiment C: Selecting a marble from this bag that has an odd number written on it.



Justify your answer. Include the theoretical probabilities for all three experiments.

Experiment ____ has an outcome with a greater probability than the others.

11 Packages of flags are on sale for Canada Day at two stores.

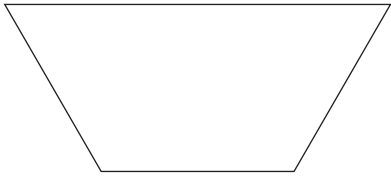
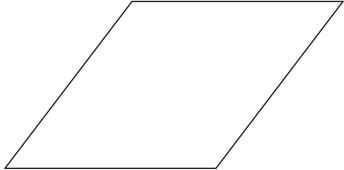
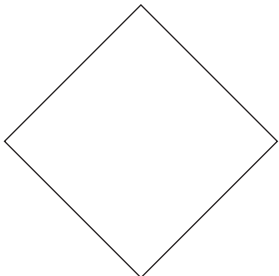
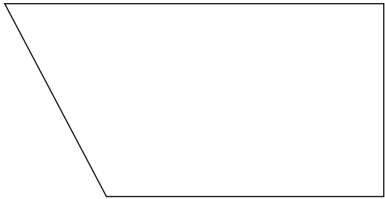
- Store A is selling a package of 5 flags for \$6.95.
- Store B is selling a package of 3 flags for \$4.80.

How much cheaper is one flag at Store A than at Store B?

Show your work.

One flag at Store A is \$ _____ cheaper than at Store B.

12 Which quadrilateral has 2 acute angles and only 1 line of symmetry?

- 
- 
- 
- 

13 This table shows the heights of 6 players on a volleyball team.

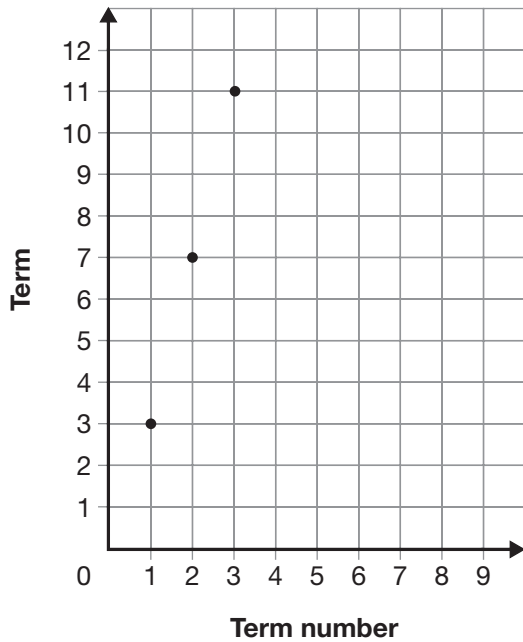
Player Height

Player	Height (cm)
Chinua	138
Zaki	132
Baina	116
Bohumir	138
Nura	126
Leslie	130
Peter	?

If the mean height of all 7 players is 128 cm, which of the following is Peter's height?

- 138 cm
- 131 cm
- 130 cm
- 116 cm

- 14** The first three terms of **Pattern A** are shown on this grid.



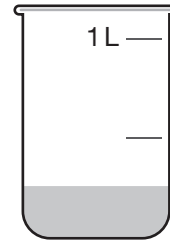
The pattern continues to increase by the same amount each time.

The rule for **Pattern B** is start at 9, and add 3 to get to the next term.

Which statement is **true**?

- The 7th term in both patterns is 27.
- Pattern A will reach a term with a value of 15 first.
- The terms in both patterns are only odd numbers.
- Pattern A will always have a term with a greater value than Pattern B at the same term number.

- 15** Which measurement is the best estimate of the volume of liquid in the container?



- 0.5 L
- 25 dL
- 250 mL
- 1000 mL

- 16** There are a total of 75 students in 3 classes. Each class has the same number of students.

Each student needs 2406 popsicle sticks for a science project.

How many popsicle sticks does each class need?

- 60 150
- 173 232
- 180 450
- 541 350

17 This table shows the number of marbles in a bag by colour.

Bag of Marbles

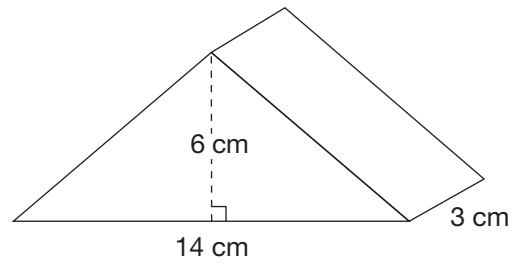
Colour	Number of marbles
Blue	1
Green	3
Red	2
Yellow	4

One marble is randomly selected from the bag.

What is the probability of **not** selecting a yellow marble?

- 0.2
- 0.3
- 0.4
- 0.6

18 Which of the following expressions represents the volume of this triangular prism?



- $6 \times 14 \times 3$
- $6 + 14 + 3$
- $14 \times 6 \div 2 \times 3$
- $14 + 6 + 3 \div 2$



STOP