

# Released Assessment Questions, 2016

## Primary Division

Grade

# 3

# 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.

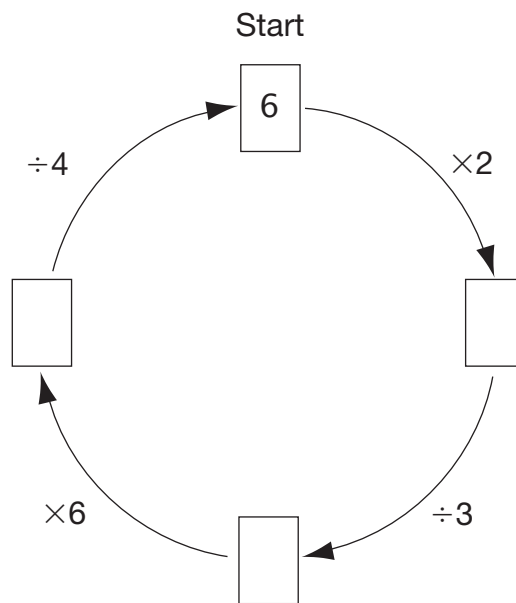


**You may not use  
a calculator or manipulatives  
for questions 1–4.**

**1** What is  $79 + 22$ ?

- 91
- 101
- 191
- 911

**2** What numbers go in the boxes, in order, to make this diagram correct?



- 3, 1, 6
- 3, 9, 54
- 12, 3, 18
- 12, 4, 24

- 3** Petra reads 22 books in October and 39 books in November.

Which estimate is closest to the total number of books Petra reads during these months?

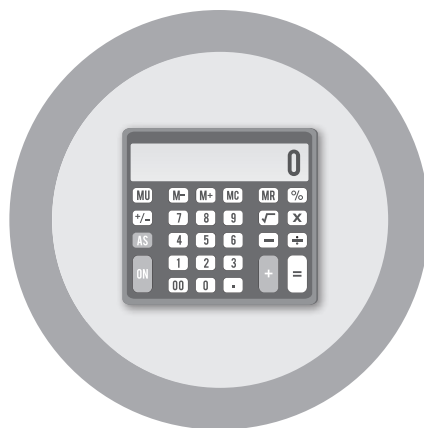
- 40
- 50
- 60
- 70

- 4** Brock has 112 trading cards. His brother gives him 108 more. Brock then gives away 130 cards to a friend.

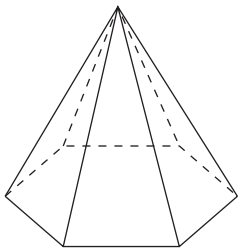
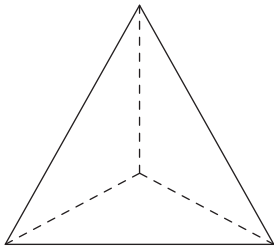
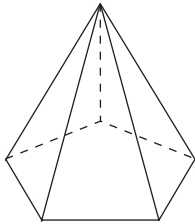
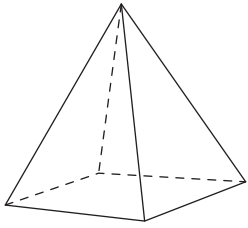
How many trading cards does Brock have left?

- 350
- 110
- 90
- 80

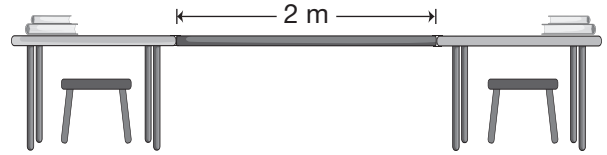
**You may now use  
a calculator and/or manipulatives.**



5 Which figure is a pentagonal pyramid?



6 Sammy joins 3 pieces of wood to make the 2 m bridge between these two desks.



The first piece is 70 cm.

What could the measurements of the other 2 pieces be?

- 10 cm and 20 cm
- 50 cm and 50 cm
- 70 cm and 50 cm
- 80 cm and 50 cm

7 This pattern has two missing numbers.

85, \_\_\_\_, 73, 67, \_\_\_\_, 55, 49, 43

What is the rule for this pattern?

- +12
- +6
- 6
- 12

**8** There are 24 students in Mrs. Lowe's Grade 3 class. She divides the class into 4 equal groups.

Make a drawing to show the 24 students divided into 4 equal groups.

One of these groups goes to the library.

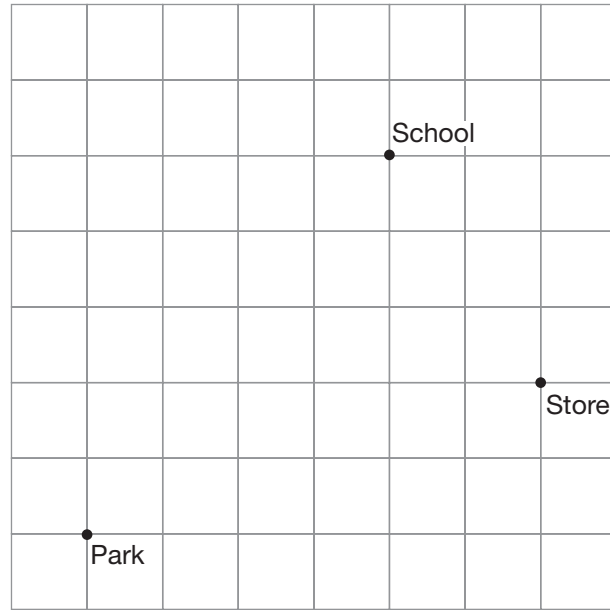
What fraction of the groups goes to the library?

Justify your answer.

The fraction of the groups that goes to the library is

\_\_\_\_\_.

**9** Draw the **shortest** path from the school to the park and the **shortest** path from the school to the store on these grid lines.



1 unit

Describe both paths.

**School to the park**

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**School to the store**

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**10** Kyle creates this number pattern:

- Start at 1 and add 6 each time.

Marla creates this number pattern:

- Start at 3 and add 7 each time.

Write a number that is in both Kyle's and Marla's patterns.




Justify your answer.

The number \_\_\_\_\_ is in both patterns.



**11** Some of the results of a survey about the favourite snacks of 24 students are shown in this pictograph.

**Favourite Snacks**

Snack	Number of students
Apple	
Carrots	
Crackers	
Cheese	

**Key**

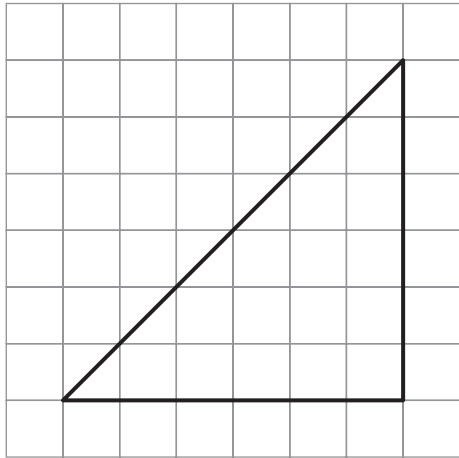
Each  represents 2 students.

The information for the number of students who have chosen cheese is missing.

Complete the pictograph to show how many students have chosen cheese.

Justify your answer.

12 What is the area of this triangle?



1 square unit

- 15 square units
- 17 square units
- 18 square units
- 21 square units

13 Which number pattern shows adding 5 each time?

- 9, 14, 19, 24, 29, ...
- 9, 13, 17, 21, 25, ...
- 37, 32, 27, 22, 17, ...
- 37, 33, 29, 25, 21, ...

14 This pictograph shows information about the leaves that Mr. Smith has for an art project.

Leaves for Art Project

Colour	Number of leaves
Yellow	
Orange	
Red	
Brown	

Key

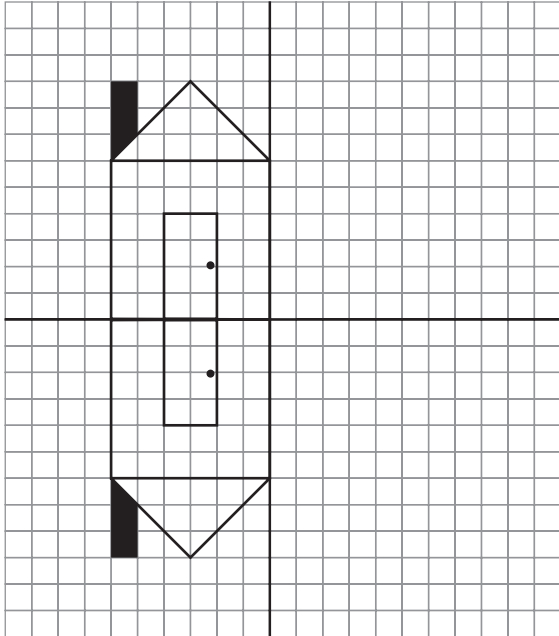
Each represents 4 leaves.

How many leaves does he have in total?

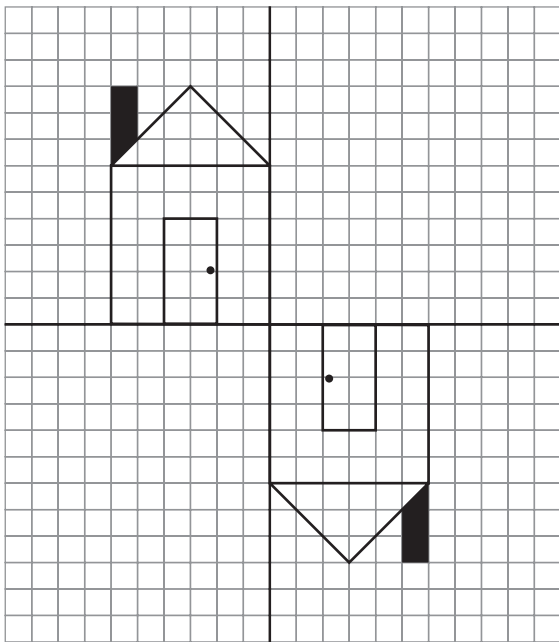
- 8
- 16
- 30
- 32

15 Which shows a transformation that matches its title?

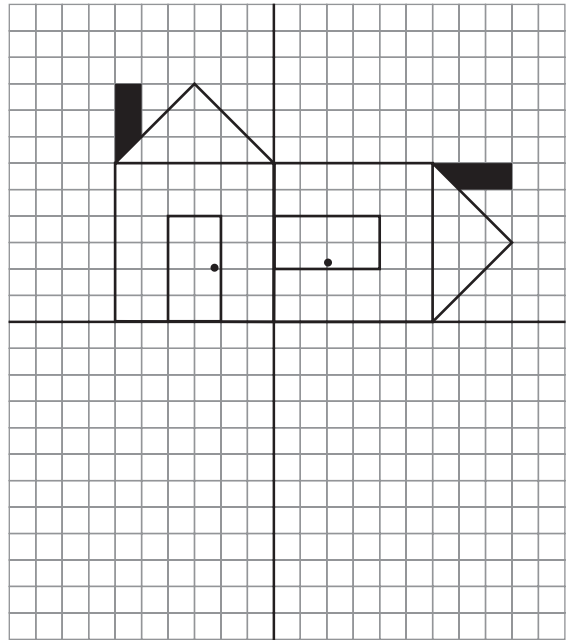
**Translation**



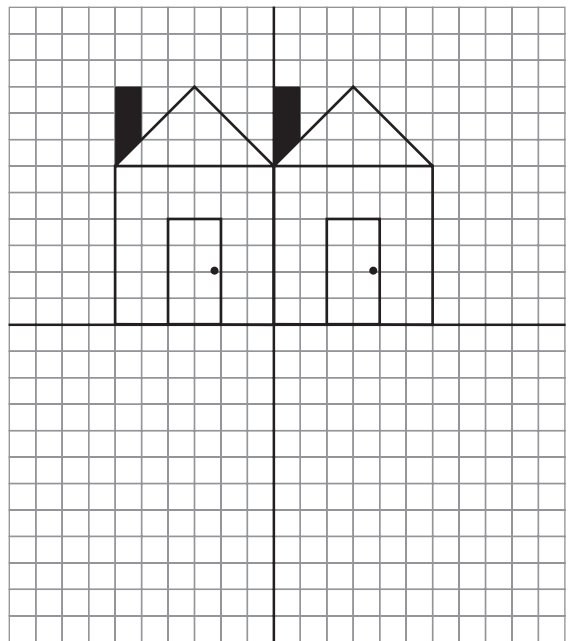
**Rotation**



**Translation**



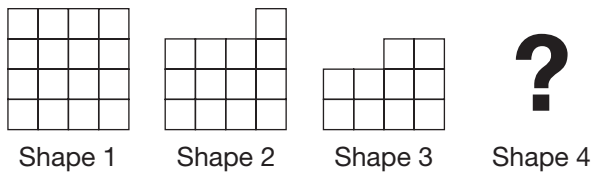
**Reflection**



16 Which measurement is the longest?

- 1 m
- 21 m
- 36 cm
- 1 m 8 cm

17 A pattern is made by removing 3 blocks each time.

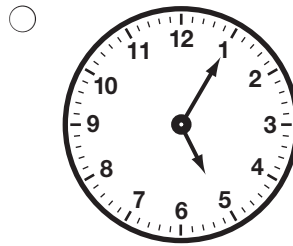
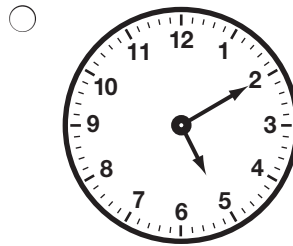
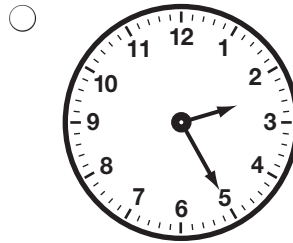
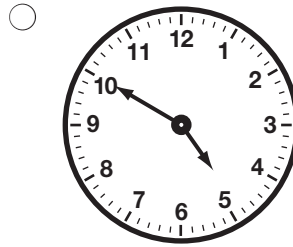


The pattern continues.

How many blocks will Shape 4 have?

- 7
- 8
- 10
- 13

18 Which clock shows ten minutes past five o'clock?



**STOP**

## Section 2

**After each assessment, EQAO makes approximately half of the test items (questions) public. This allows EQAO to build a bank of assessment material that can be used in the future. Items that are not published in this booklet (Section 2) are replaced by their description. Test booklets and examples of student answers from the past five years are available at [www.eqao.com](http://www.eqao.com).**

**Items that are not being published have been described below, with a reference to the skill they assessed.**

- 1** compose or decompose three-digit numbers (Knowledge and Understanding)
- 2** determine the values of coins (Application)
- 3** count forward by 5s from a starting point (Thinking)
- 4** add and subtract money amounts (Thinking)
- 5** measure lengths using standard units (Application)
- 6** estimate masses of objects using standard units (Knowledge and Understanding)
- 7** select the most appropriate standard unit (Knowledge and Understanding)
- 8** determine the relationship between weeks and years (Application)
- 9** record the perimeter of two-dimensional shapes (Thinking)
- 10** identify geometric properties of various polygons (Knowledge and Understanding)
- 11** identify polygons (Application)
- 12** identify geometric properties of a prism and pyramid (Application)
- 13** identify the properties of zero and one in multiplication (Knowledge and Understanding)
- 14** extend a repeating pattern (Application)
- 15** determine a missing number in an equation (Thinking)
- 16** sort and classify objects (Knowledge and Understanding)
- 17** demonstrate an understanding of fairness in a game (Application)
- 18** display data in a graph (Application)