Cambridge Assessment International Education

# Cambridge Primary Checkpoint

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|---|---|---|---|---|---|---|---|---|---|
| CANDIDATE NAME | | | | | | | | | |
| CENTRE NUMBER | | | | | | CANDIDATE NUMBER | | | |

*7192504285*

**MATHEMATICS** **0096/02**

Paper 2 **April 2024**

**45 minutes**

You must answer on the question paper.

You will need: Compasses
Protractor
Tracing paper (optional)

**INSTRUCTIONS**

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You should show all your working in the booklet.
- You may use a calculator.

**INFORMATION**

- The total mark for this paper is 40.
- The number of marks for each question or part question is shown in brackets [ ].



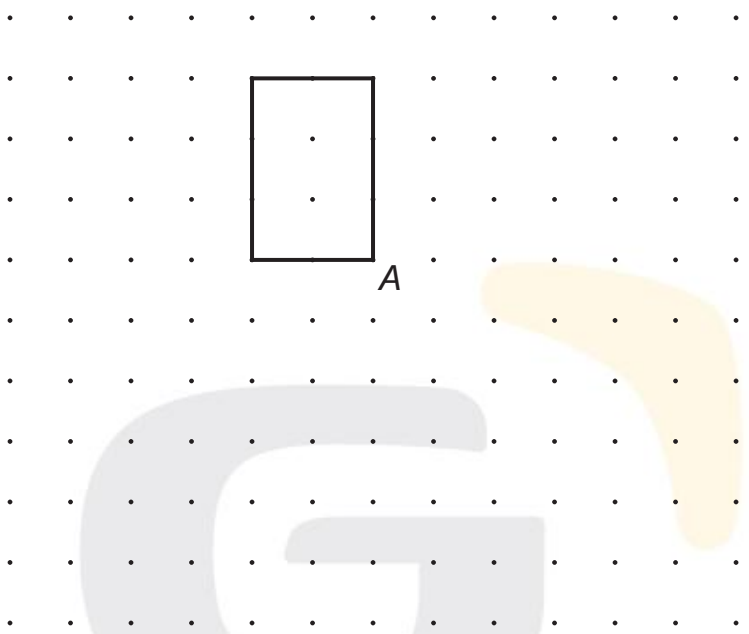
This document has **20** pages.

**1** Calculate.

$$\frac{1}{3} - \frac{1}{5}$$

..... [1]

**2** Here is a rectangle drawn on a dotted grid of squares.
One of the vertices is labelled *A*.




The rectangle is rotated 90 degrees clockwise around vertex *A*.

Draw the rectangle in its new position. [1]

**3** Here are some numbers.

$\frac{3}{4}$ 45% 0.6

Write each number in a box to make the statement correct.

□ < □ < □

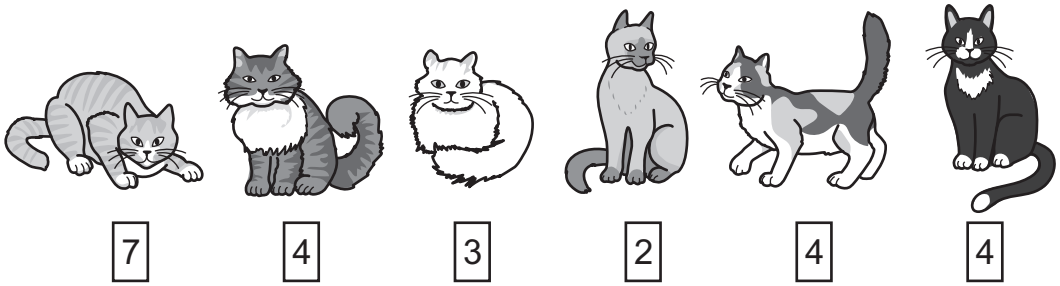
[1]



**4** Pierre has six cats.

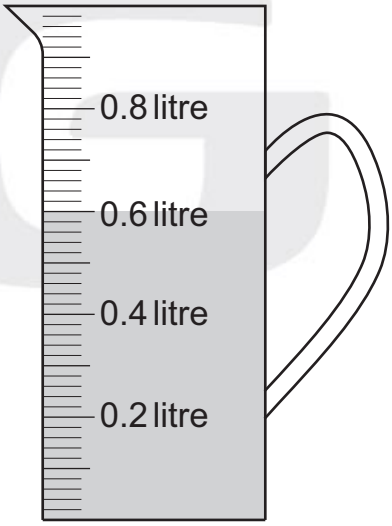
The cards show the age of each cat in years.




Write the range of the ages of the cats.

..... years [1]

**5** Here is a picture of a jug with water inside.




Write the word **capacity** or **volume** in each space to complete the sentences.

The ..... of the jug is greater than the ..... of water.

The ..... of water is 0.6 litre.

The ..... of the jug is 1 litre.

[1]



**6** Here is some data about the number of books the children in two classes read in a month.

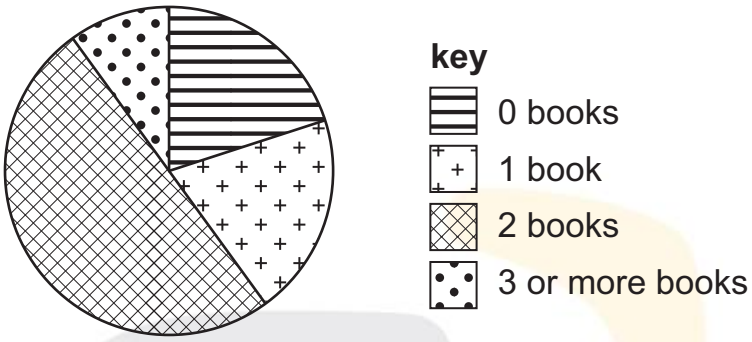
Data from Class R is recorded in a table.

Number of books read by children in Class R

| **Number of books read** | 0 | 1 | 2 | 3 or more |
|---|---|---|---|---|
| **Number of children** | 3 | 8 | 12 | 7 |

Data from Class T is recorded in a pie chart.

Number of books read by children in Class T

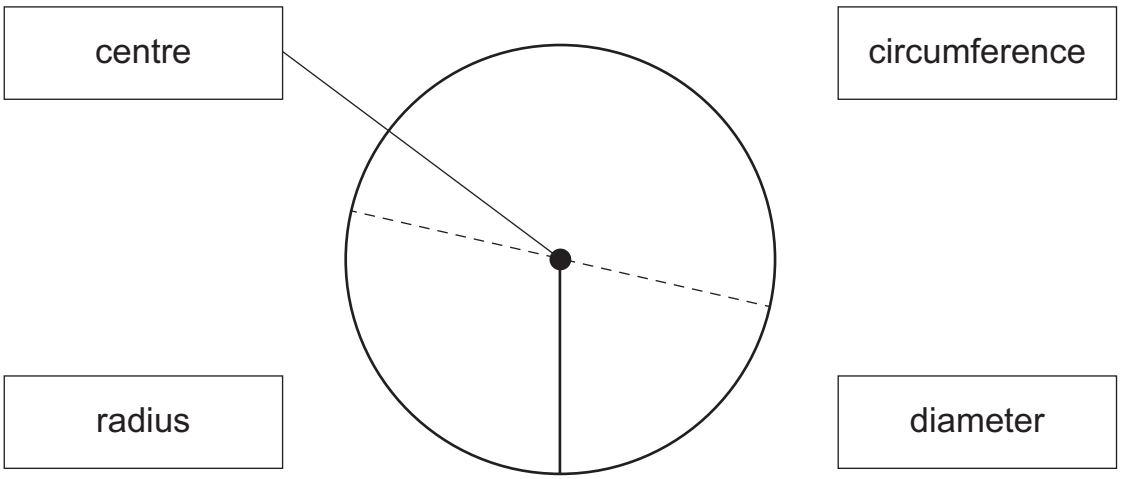



Gabriella wants to compare the number of children in each class who read 2 books in a month.

Write **one** extra piece of information Gabriella needs to know.

.....[1]

**7** Here is a circle.
The centre is marked.




Draw a line to match each label to the correct part of the circle. [1]



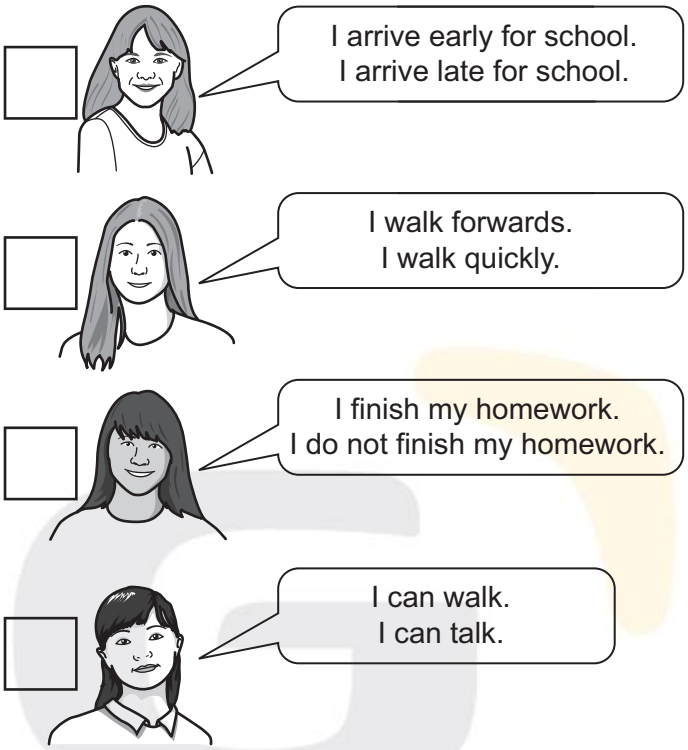
 

**8** Write the correct number in each box to complete the calculation.

$$46 \times 34 = 46 \times \square + \square \times 4$$

[1]

**9** Some children try to describe pairs of mutually exclusive events.




Tick (✓) **all** the children who correctly describe mutually exclusive events. [1]



**10** Write a two-digit number ending in 7 that is a prime number.

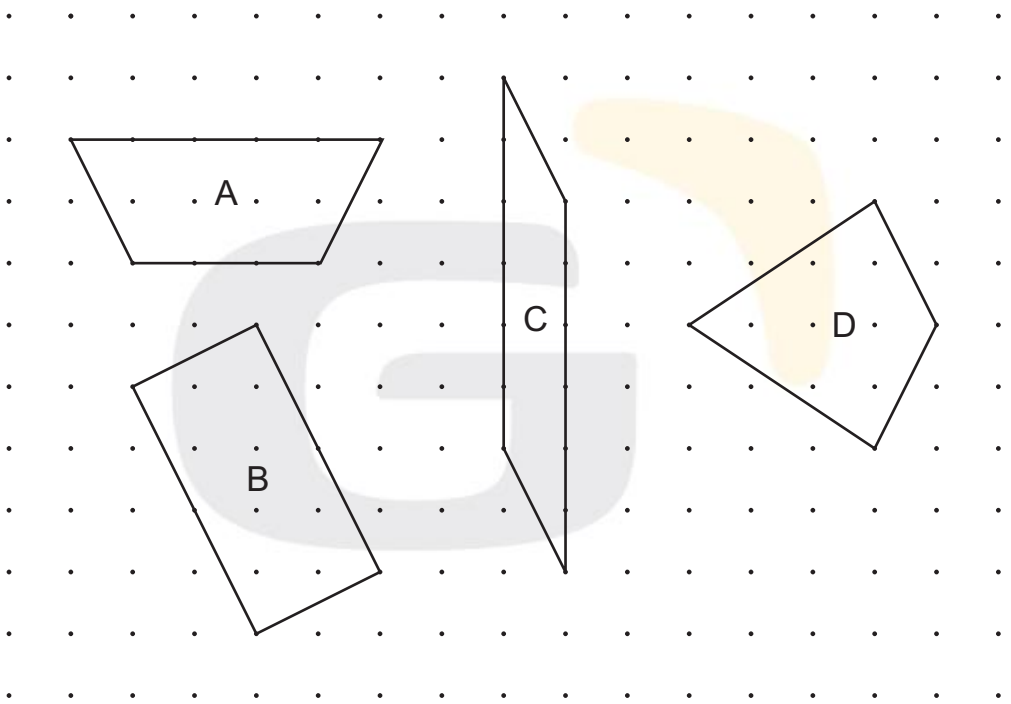
.....

Write a two-digit number ending in 7 that is **not** a prime number.

.....

[1]

**11** Here are four quadrilaterals drawn on a dotted grid of squares.




The quadrilaterals are labelled A, B, C and D.

Write the letter of the correct quadrilateral next to each statement.

| | |
|---|---|
| The shape has **no** lines of symmetry. | |
| The shape has **no** parallel lines. | |
| The shape has 1 pair of parallel lines. | |

[1]



**12** Safia collects information about each child in her class.

**(a)** Draw a ring around the set of data that does **not** have a median.

number of days until next birthday

colour of eyes

height in centimetres

number of pets

[1]

**(b)** Here is Safia's data about number of pets.

1 1 3 1 1 4 3 0 5 1

Calculate the mean number of pets.

..... [1]

**13** Tick (✓) **all** the statements that are equivalent to 42.573

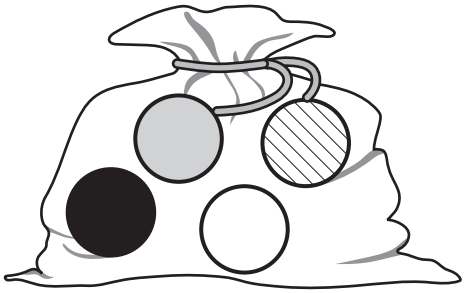
| | |
|---|---|
| 42 ones and 573 thousandths | ☐ |
| 425 tenths and 73 hundredths | ☐ |
| 4 tens, 2 ones, 57 hundredths and 3 thousandths | ☐ |
| 42 ones, 57 tenths and 3 thousandths | ☐ |
| 4 tens, 2 ones, 5 tenths, 7 hundredths and 3 thousandths | ☐ |

[2]



**14** A bag contains exactly 1 white ball, 1 grey ball, 1 black ball and 1 striped ball.



Eva picks one ball at random.
Draw a line to match each event to the correct probability.

| Event | Probability |
|---|---|
| The ball is white. | 75% |
| The ball is **not** striped. | 0% |
| The ball is either grey or white. | 1 out of 4 |
| The ball is yellow. | 1 out of 2 |

[1]

**15** **Two** horses need 36 000 kg of hay each year.

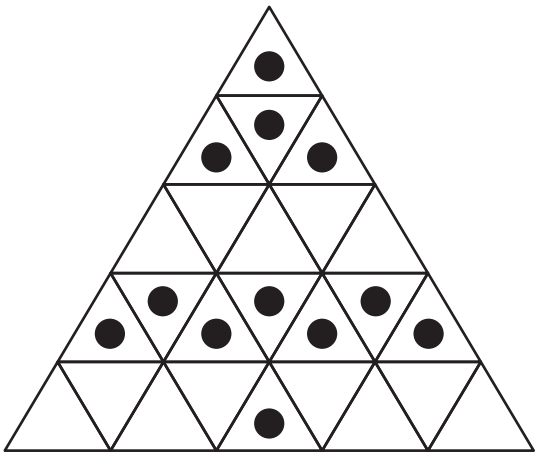
Calculate the amount of hay that seven horses need each year.

..... kg [1]



**16** Here are 25 small triangles.



A fraction of the small triangles have a dot inside.

Draw a ring around **each** number that is equivalent to this fraction.

0.48 12% 0.12 $\frac{12}{13}$ 48% $\frac{12}{25}$

[2]

**17** Hassan makes a sequence by halving square numbers.
He records the numbers in a position-to-term table.

| Position | Term |
|---|---|
| 1st | $\frac{1}{2}$ |
| 2nd | 2 |
| 3rd | $4\frac{1}{2}$ |
| 4th | 8 |

Write the 8th term in the sequence.

..... [1]



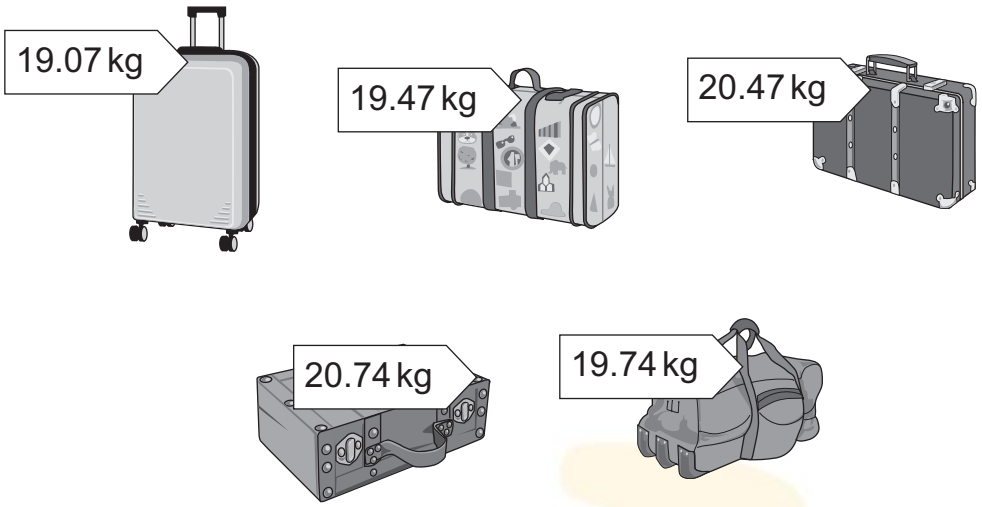
**18** Write **two** common multiples of 12 and 30

K

..... [1]

**19** Here are some suitcases.

K



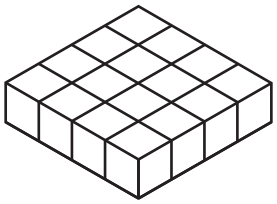

The mass of each suitcase is shown on the label.

Oliver rounds each mass to the nearest kilogram.

Draw a ring around **each** suitcase with a mass that rounds to 20 kilograms. [1]

**20** Here is a drawing of a cuboid made from 16 small cubes.

K



Youssef uses a number of these **cuboids** to make a cube.

Write the total number of **cuboids** that Youssef uses to make the cube.

..... [1]



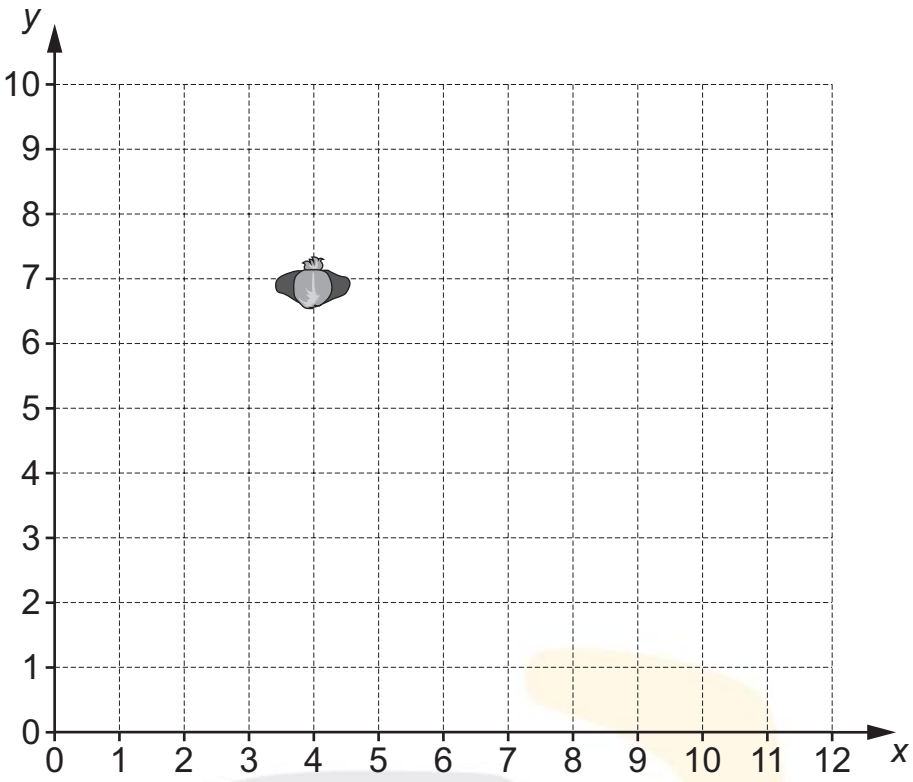
**21** Here are some angles.

Draw a ring around the angle that is 112°. [1]



**22** A coordinate grid is drawn on the playground at Mia's school.




Mia walks in straight lines between points on the grid.
The straight lines can be joined to make a square.

Complete the instructions for her walk.

Start at (4, 7).

Go to (4, 3).

Go to (8, 3).

Go to ( ..... , ..... ).

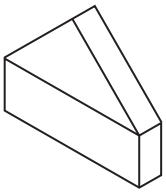
Go to (4, 7). [1]

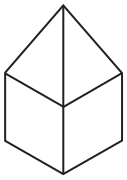


**23** Lily makes some models.
She uses a cuboid and one other 3D shape for each model.

**(a)** Draw a line to match each model to the name of the **other** 3D shape she uses.





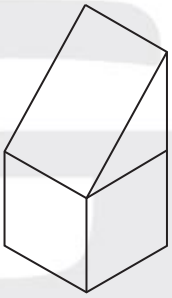
triangular prism

square-based pyramid

triangle-based pyramid

[1]

**(b)** Lily makes a new model.



Complete the table to show the properties of the new model.
One has been done for you.

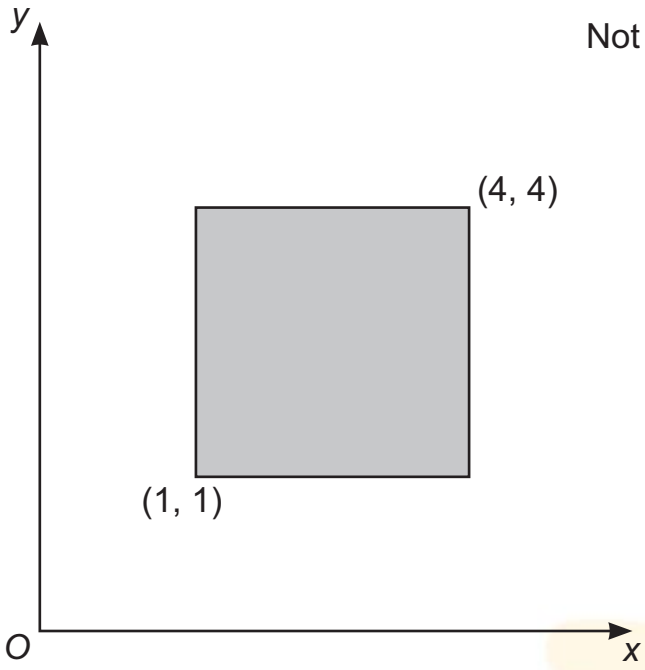
| | |
|---|---|
| number of edges | 12 |
| number of faces | ..... |
| number of vertices | ..... |

[1]



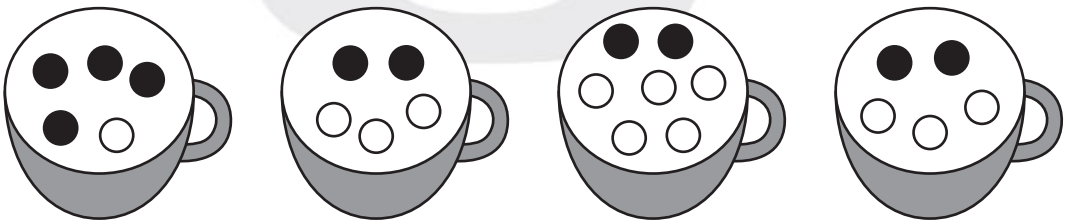
**24** Anastasia draws a square on a coordinate grid.
She marks two of the vertices.




Write the coordinates of a point that is **inside** the square.

( ..... , ..... ) [1]

**25** Here are four cups with black and white balls inside.




Samira picks **two** of the cups.
She puts all the balls from her two cups into an empty bag.

Samira says, 'I have an even chance of picking a black ball from my bag.'

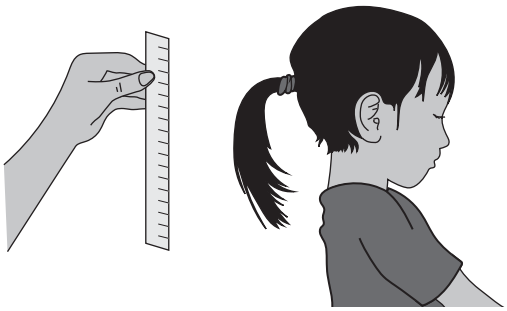
Write the names of the two cups that Samira picks.

..... and ..... [1]

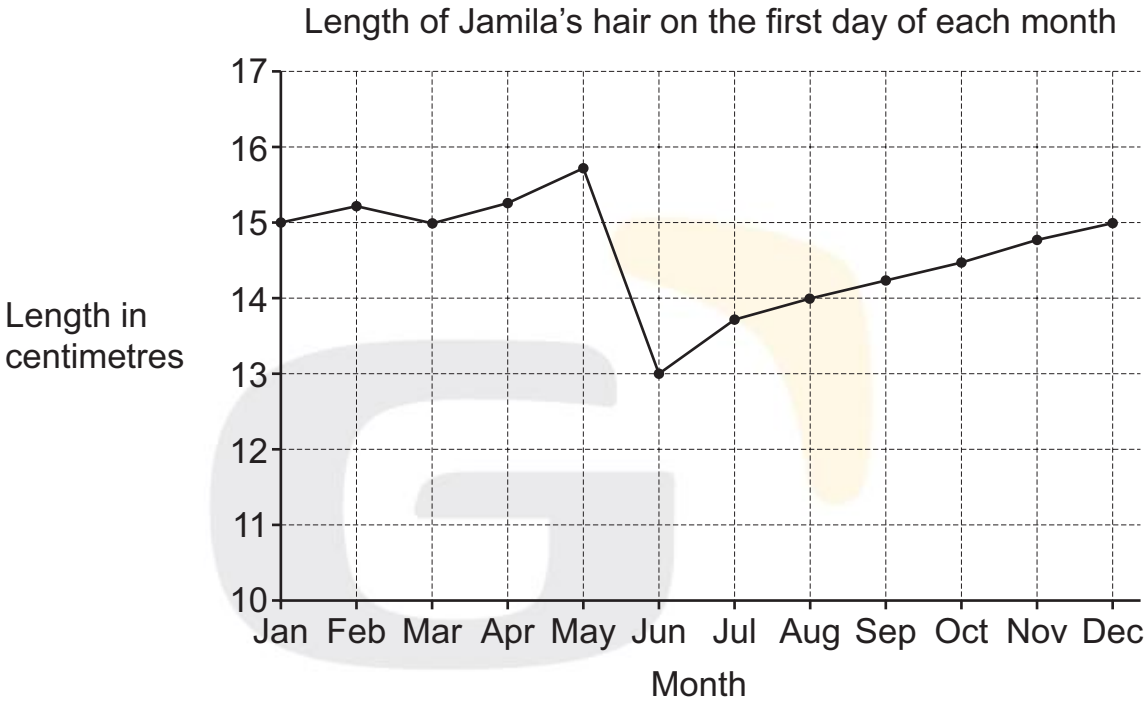


**26** Jamila measures the length of her hair on the first day of each month.



Here is a graph that shows her measurements.




Tick (✓) the statements that are true about the information shown on the graph.

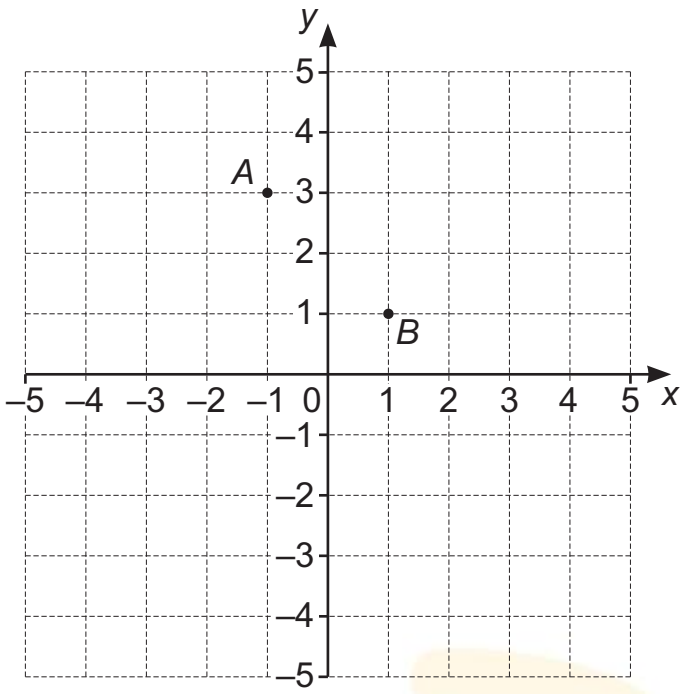
The difference in the length of Jamila's hair between each measurement is the same. ☐

Jamila's hair is 2 centimetres longer at the start of January than at the start of December. ☐

Jamila's hair is 1 centimetre longer at the start of August than at the start of June. ☐

[1]

**27** Here is a coordinate grid.




Mike draws a line on the grid.
Points *A*, *B* and *C* are on the line.
The coordinates of *A* are (–1, 3).
The coordinates of *B* are (1, 1).

Draw a ring around **all** the coordinates Mike could use for *C*.

(1, 2) (3, –1) (–2, 3) (5, 3) (0, 2)

[1]



**28** Yuri has $240

He spends $\frac{5}{8}$ of his money on a new bicycle.

Hassan has $120

He wants to buy a bicycle that costs $1\frac{1}{2}$ times the amount of money he has.

Calculate the difference between the prices of the two bicycles.

$ ..... [2]

**29** Safia writes a sequence by counting in steps of 3
The 8th term in her sequence is 32

Gabriella writes a different sequence by counting in steps of 5
The 8th term in her sequence is 64

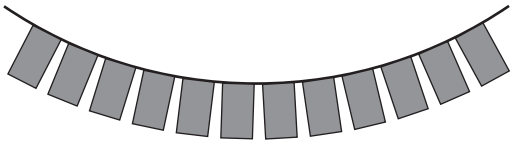
Write the difference between the first terms in their sequences.

..... [2]



**30** Carlos makes flags to decorate his house.



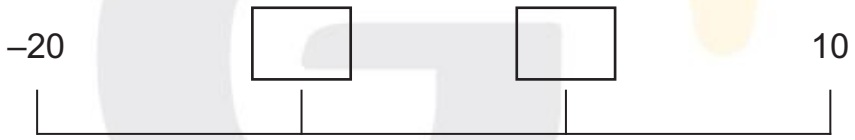
He uses one-quarter of a metre of material to make 15 flags.

Calculate the amount of material he uses to make 75 flags.

..... metres [1]

**31** A number line is marked in steps of constant size.

Write the correct number in each box.

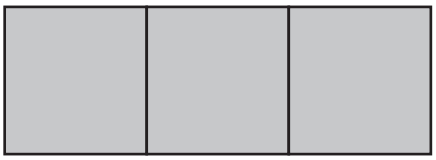



[1]



**32** Chen joins **three** squares to make a rectangle.



Not drawn to scale

The perimeter of the rectangle is 8 cm.

Chen adds three **more** squares to make a new shape.
The perimeter of the new shape is 12 cm.

Sketch **two** new shapes that Chen could make.

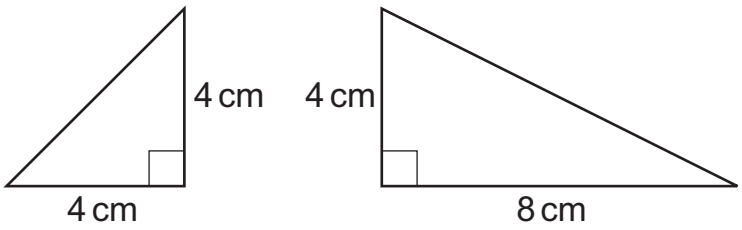
[2]



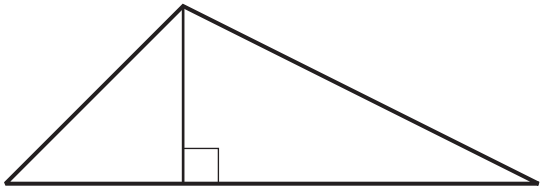
 

**33** Here are two right-angled triangles.

Not drawn to scale




The triangles are joined together to make a large triangle.



Calculate the area of the large triangle.

..... $cm^2$ [1]

