



Mathematics

Stage 5

Paper 2

2022

Cambridge Primary Progression Test

Name

Class

Date

45 minutes

Additional materials: Calculator
Set square
Tracing paper (optional)

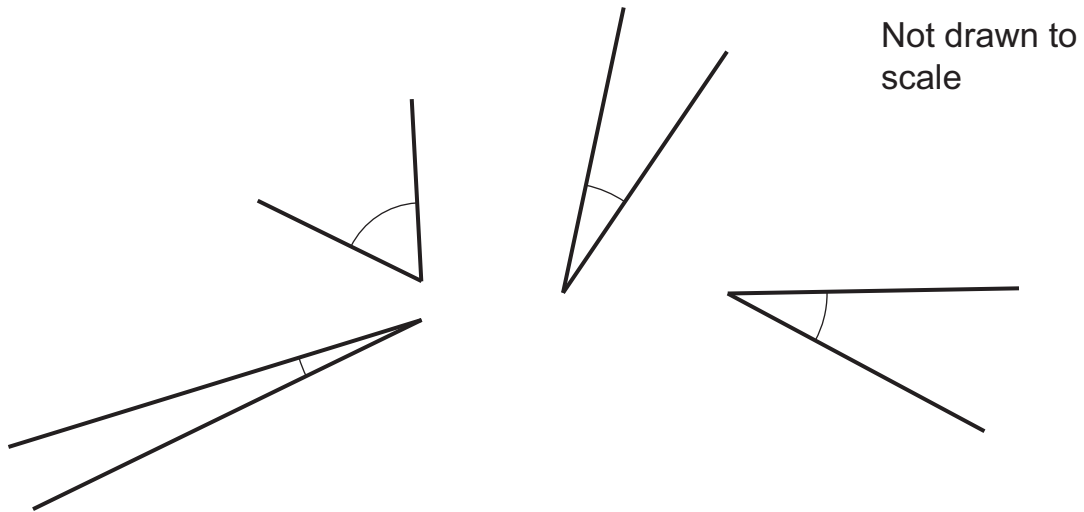
INSTRUCTIONS

- Answer **all** questions.
- Write your answer to each question in the space provided.
- You should show all your working on the question paper.
- 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 [].

1 Mike draws these angles.



Tick (✓) **all** the statements about these angles that are true.

They are all less than a right angle.

☐

They are all less than 180 degrees.

☐

There are no obtuse angles.

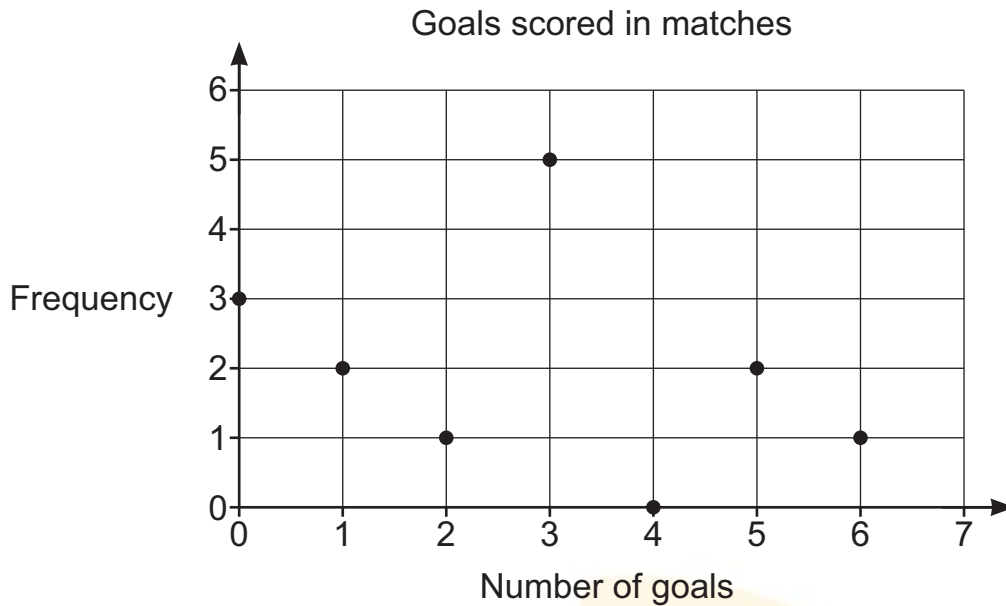
☐

They are all more than a quarter turn.

☐

[1]

- 2 Gabriella collects data about the number of goals scored in matches by her netball team.
Here are her results.



- (a) What was her team's **highest** score?

..... goals [1]

- (b) How many times did her team score **no goals**?

..... [1]

- 3 Naomi is counting back in sevens.

Write the next **three** numbers in her sequence.



27, 20, 13,,,

[1]

4 Lily thinks of a 4-digit number.



My number has 8 ones and 3 thousands.
The sum of the 4 digits is 12

(a) Write a number that Lily could be thinking of.

..... [1]

(b) Lily multiplies her number by 10 to make a new number.

Write the number of **tens** her new number has.

..... [1]

5 Tick (✓) **all** the events that take less than 1 second.

Eat a bowl of soup

☐

Clap your hands once

☐

Eat an apple

☐

Say hello

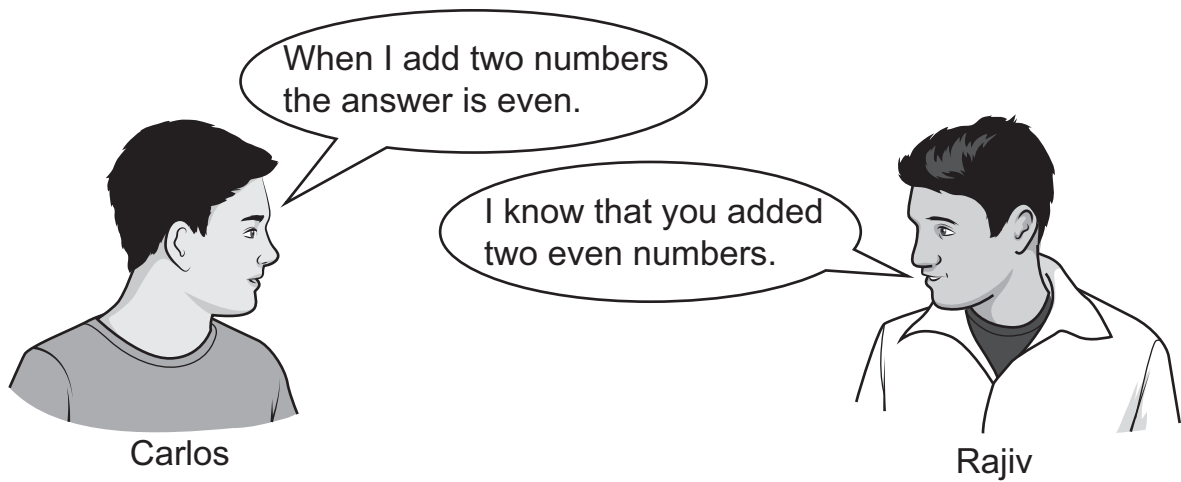
☐

Read a book

☐

[1]

- 6 Carlos and Rajiv are adding numbers.

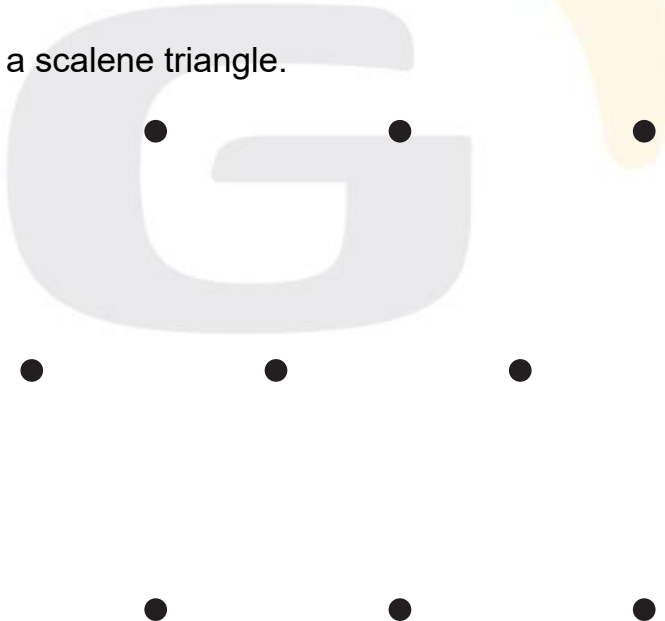


Write a digit in each box to make an addition that shows that Rajiv is **wrong**.

$$\square + \square = \square$$

[1]

- 7 Join dots to draw a scalene triangle.

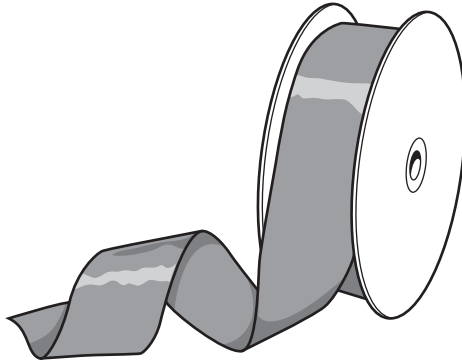


[1]

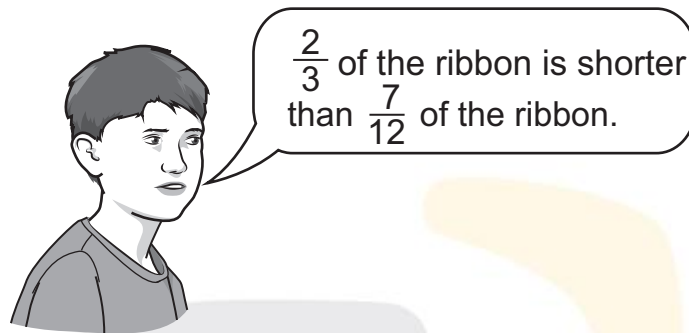
- 8 Write the number that is five-tenths more than 4.79

..... [1]

- 9 Oliver has a piece of ribbon.



Oliver says,



Tick (✓) to show if Oliver is correct.

Yes

☐

No

☐

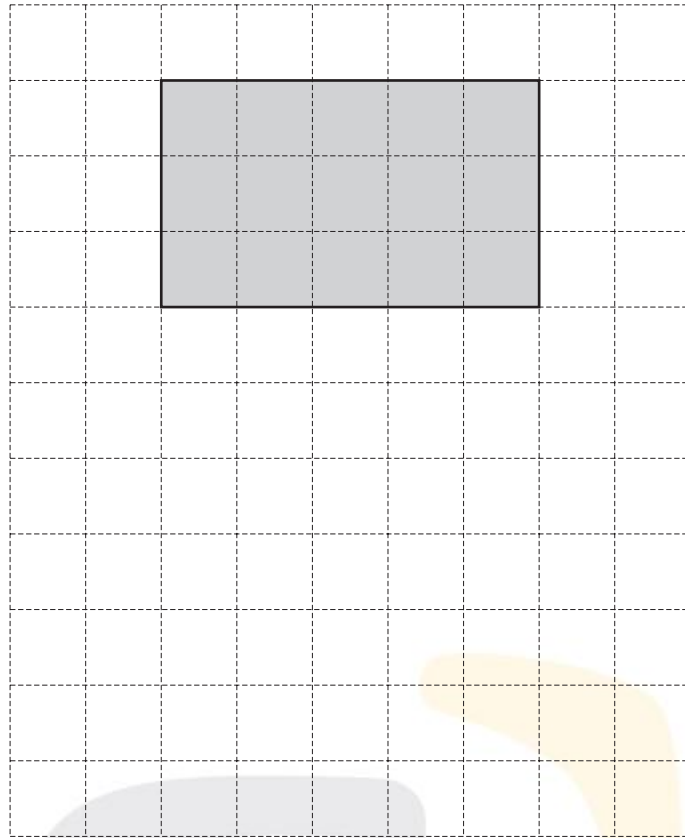
Explain how you know.

.....

.....

[1]

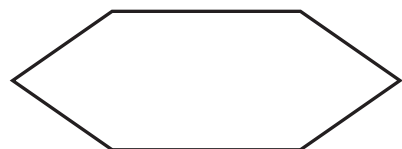
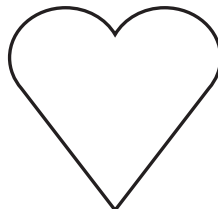
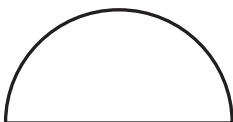
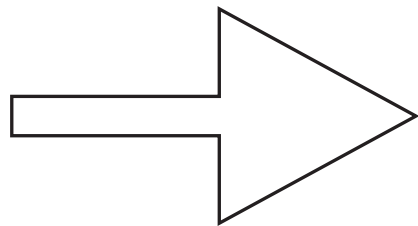
10 Here is a rectangle drawn on a grid of squares.



Draw a square with the same perimeter as the rectangle on the grid.

[1]

11 Write a tick (✓) on **each** of the shapes that tessellate.



[1]

12 Samira is thinking of a number between -10 and 0



It has 4 hundredths and no tenths.
The ones digit is 6

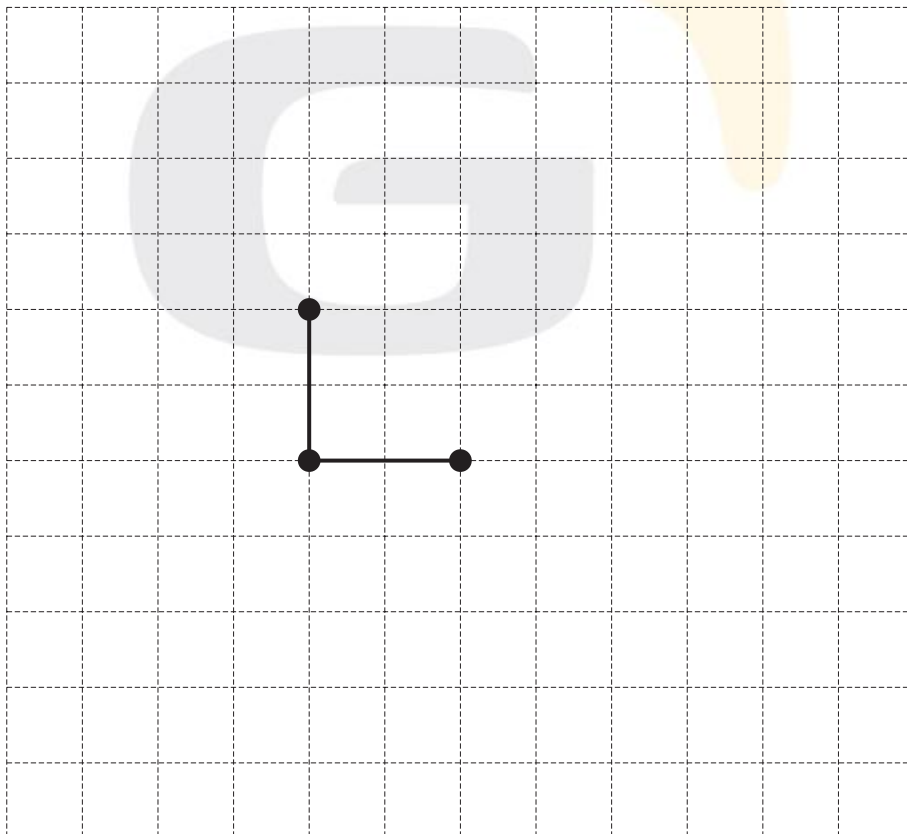
Write down Samira's number as a decimal.

..... [1]

13 Here are three dots joined by lines to make a shape.

Translate the shape 3 squares down and 2 squares right.

Draw the shape in its new position.



[1]

- 14** Hassan rounds some measurements to the nearest centimetre.
Here are his results.

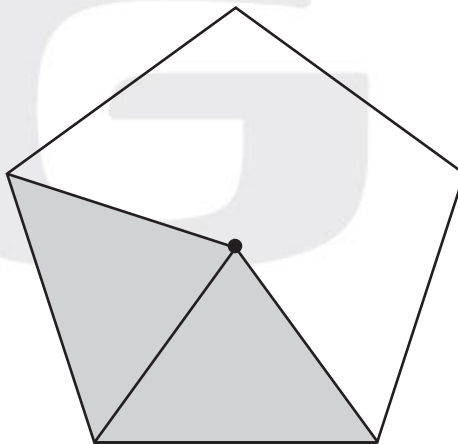
Write a cross (✕) next to all the answers that are **wrong**.

| Actual measurement | Measurement rounded to the nearest centimetre |
|--------------------|---|
| 2.3 cm | 2 cm |
| 1.8 cm | 2 cm |
| 2.6 cm | 2 cm |
| 2.5 cm | 2 cm |
| 1.4 cm | 2 cm |

| |
|--|
| |
| |
| |
| |
| |

[1]

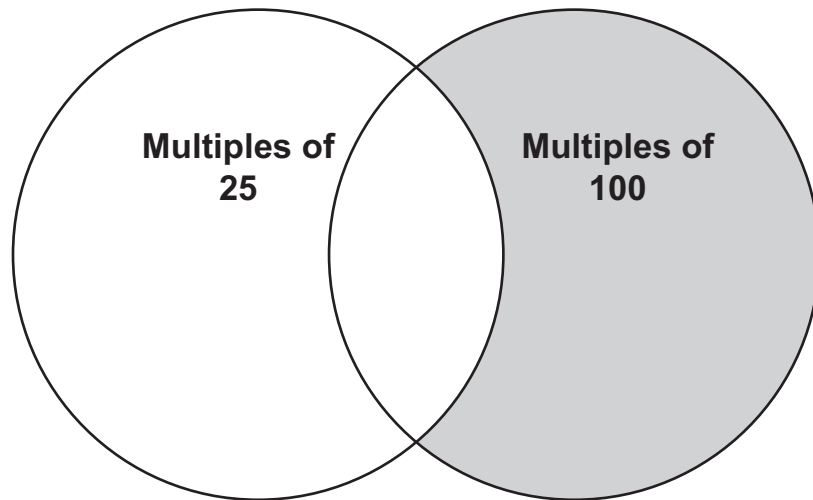
- 15** Here is a regular pentagon.
The centre is marked with a dot (•).



Write the percentage of the shape that is shaded.

.....% [1]

- 16** Pierre sorts numbers.
He uses this diagram.
One section is shaded.



Pierre says,
'There will **not** be any numbers in the shaded section.'

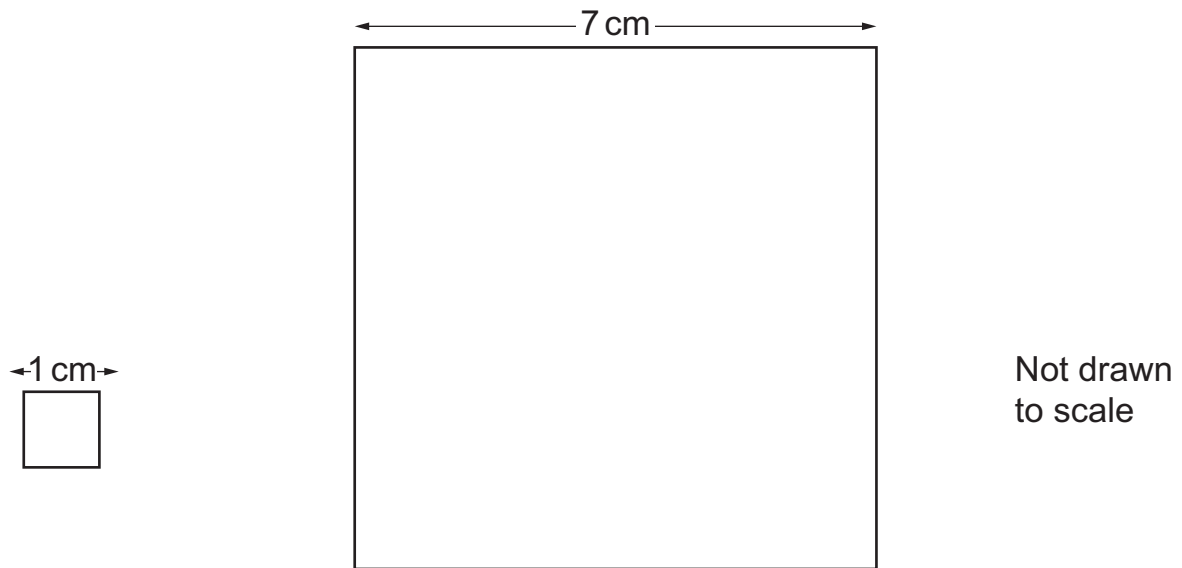
Explain why Pierre is right.

.....

.....

..... [1]

17 Ahmed draws a small square and a big square.



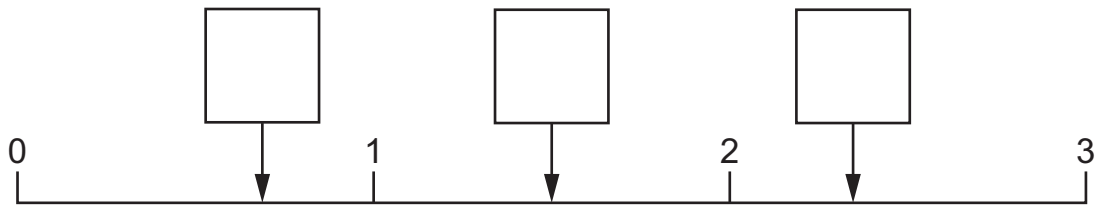
Ahmed wants to find out how many small squares will fill the inside of the big square.

Tick (✓) **each** calculation Ahmed could use to find out.

| | | | | | |
|--------------|--------------------------|-----------------------|--------------------------|--------------|--------------------------|
| $7 + 1$ | <input type="checkbox"/> | 7^2 | <input type="checkbox"/> | 7×4 | <input type="checkbox"/> |
| 7×7 | <input type="checkbox"/> | $1 \times 1 \times 7$ | <input type="checkbox"/> | $7 + 7$ | <input type="checkbox"/> |

[1]

18 Here is a number line.



Each box points to a number on the number line.

Write the correct number in each box.

Choose from the number cards.

$$\frac{7}{2}$$

$$\frac{3}{2}$$

$$\frac{2}{3}$$

$$2\frac{1}{3}$$

$$\frac{3}{3}$$

[2]

19 Angelique runs for $\frac{3}{4}$ kilometre and stops for a rest.

Then she runs a further $\frac{5}{8}$ of a kilometre.

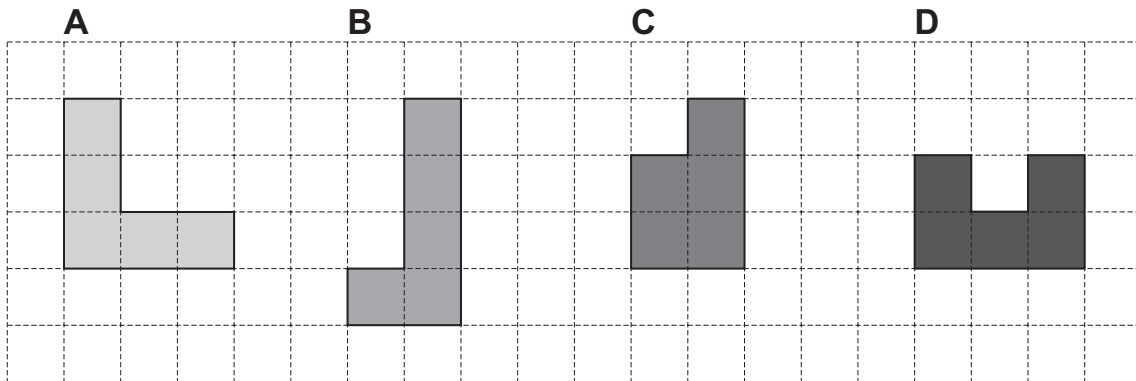
Write the distance Angelique runs altogether.

..... kilometres [1]

20 Here are four shapes.

Jamilla adds **one** square to a shape to make the net of a closed cube.

Draw a ring around the shape she uses.

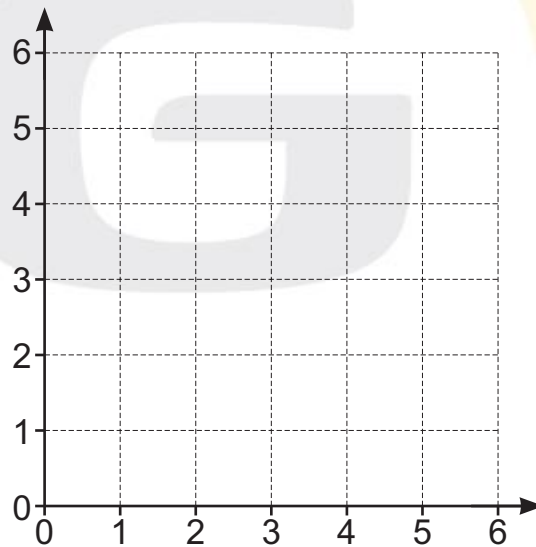


[1]

21 A square is drawn on a grid.

The coordinates of two of the vertices are $(0, 3)$ and $(3, 0)$.

Write the coordinates of the **other** two vertices of the square.



(..... ,)

(..... ,)

[1]

22 Here is a timetable for trains from Amsterdam to the airport.

| Depart | Arrive |
|--------|--------|
| 09:25 | 09:38 |
| 09:30 | 09:48 |
| 09:53 | 10:05 |
| 10:00 | 10:18 |
| 10:08 | 10:21 |
| 10:11 | 10:28 |
| 10:22 | 10:35 |
| 10:23 | 10:44 |

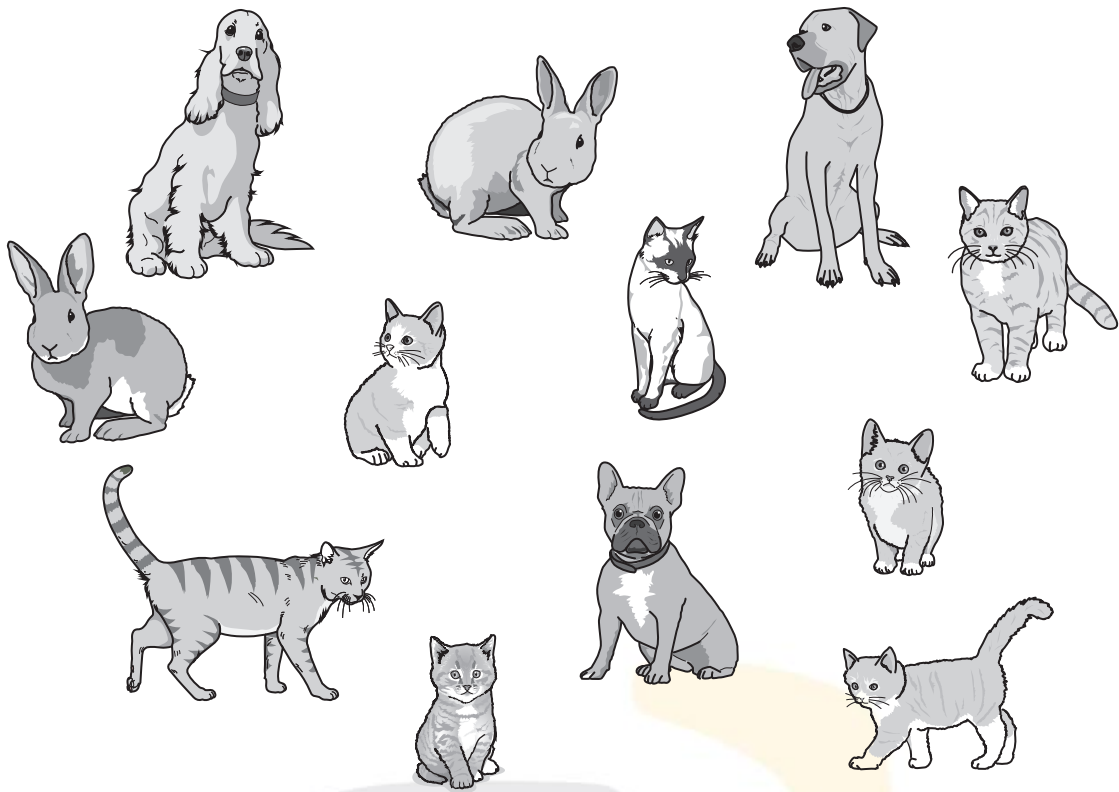
Anastasia's plane leaves at 12:15

She catches the **latest** train that gets her to the airport 2 hours before her flight leaves.

How long is her train journey?

..... minutes [1]

23 Here are the pets of children in Class 5



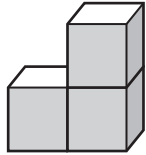
Complete the sentence to describe the proportion of the pets that are dogs.

..... in every pets is a dog. [1]

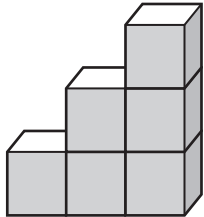
24 Carlos uses bricks to make steps.



He uses 1 brick for the 1st step.



He uses 3 bricks for the 2nd step.



He uses 6 bricks for the 3rd step.

He continues making steps in the same way.

How many bricks will Carlos use for the 6th step?

..... bricks [1]

25 Here is some information about four children.



| Chen | Eva | Mia | Yuri |
|--------------------|--------------------|--------------------|--------------------|
| height: 131 cm | height: 140 cm | height: 132 cm | height: 128 cm |
| age: 9 years | age: 10 years | age: 9 years | age: 10 years |
| handspan: 15 cm | handspan: 14 cm | handspan: 15.5 cm | handspan: 12.5 cm |
| foot length: 20 cm | foot length: 19 cm | foot length: 22 cm | foot length: 20 cm |

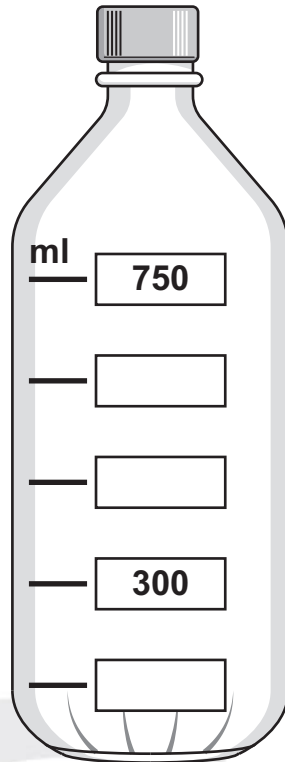
Write the names of the four children in the correct place on the Carroll diagram.

| | Height is exactly 6 times the foot length | Height is not exactly 6 times the foot length |
|---------------------------|--|--|
| Taller than 130 cm | | |
| Not taller than 130 cm | | |

[2]

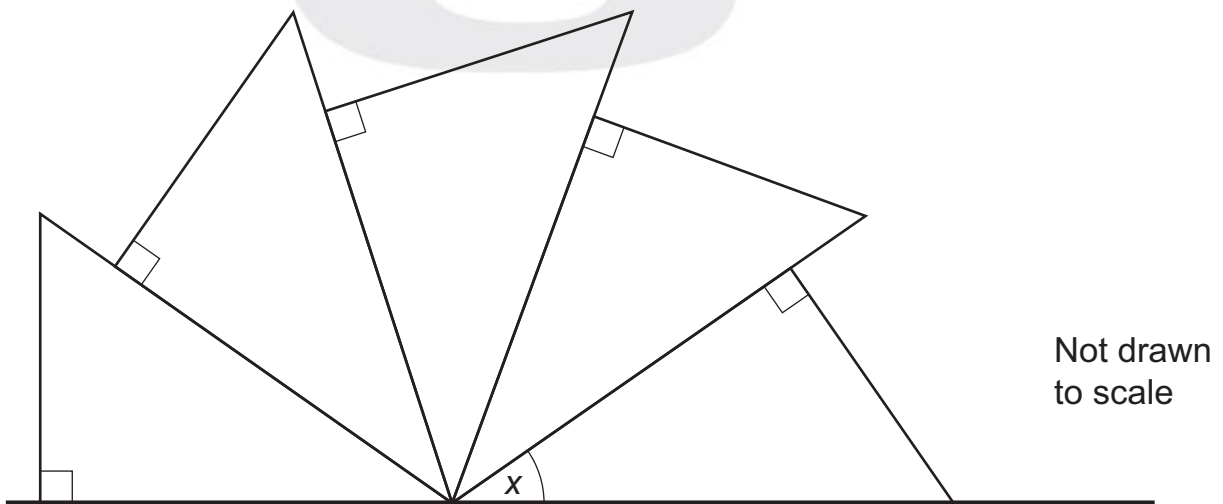
26 Naomi labels the scale on this bottle.

Write the correct number on each label.



[1]

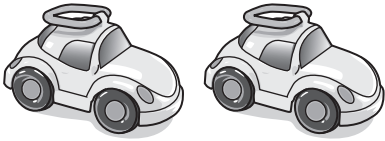

27 Five **identical** triangles are placed on a straight line.



Calculate the size of angle x .

$x = \dots\dots\dots^\circ$ [1]

- 28 Oliver and Mike buy some items at the school fair.
This table shows the items they buy and the money they spend.

| | Items they buy | Money they spend |
|--------|---|------------------|
| Oliver |  | \$8 |
| Mike |  | \$10 |

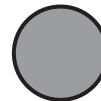
- (a) How much does **one** ball cost?

\$ [1]

- (b) The price of the car in dollars is represented by



The price of the ball in dollars is represented by



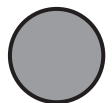


Tick (✓) the expression that shows how Mike spends his money.

 +  +  = \$10 ☐

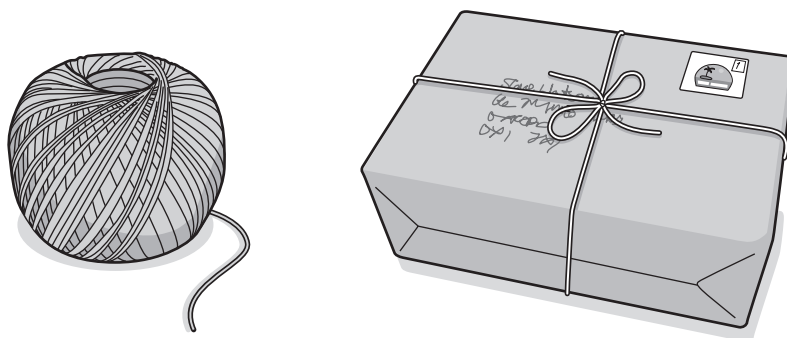
 +  +  = \$10 ☐

 +  +  = \$10 ☐

 +  +  = \$10 ☐

[1]

29 Youssef has a ball of string and a parcel.



He uses $\frac{1}{5}$ of his string to tie a parcel.

He uses 48 cm of string.

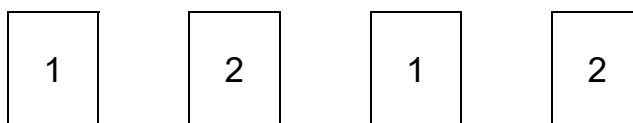
(a) Write the length of string that Youssef has left in centimetres.

..... cm [1]

(b) Write the length of string that Youssef has left in metres.

..... m [1]

30 Safia has some number cards.



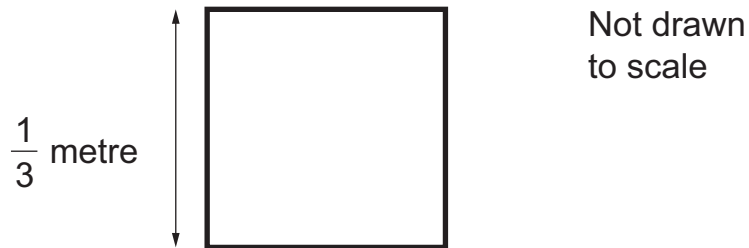
She chooses **two** of the cards to make this statement correct.

Write a number in each box to show which cards Safia chooses.

$$\boxed{} \quad 0\% < \frac{\boxed{}}{5} < 0.3$$

[1]

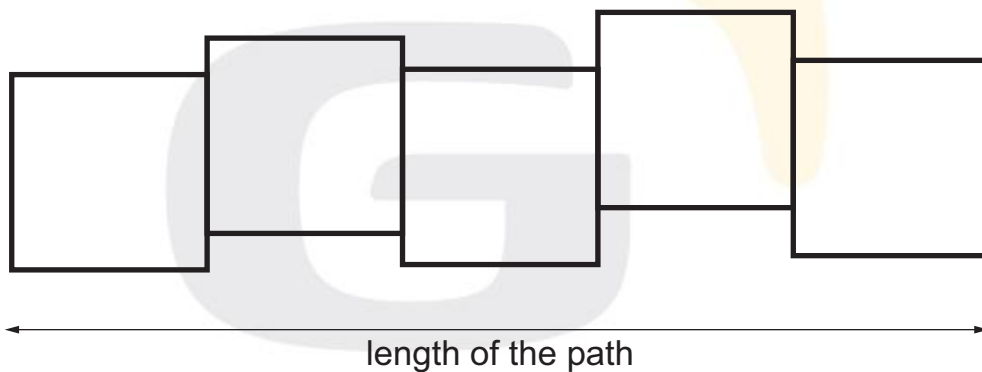
- 31** A square paving slab has a side length of $\frac{1}{3}$ metre.



- (a)** What is the perimeter of the paving slab?

..... metres [1]

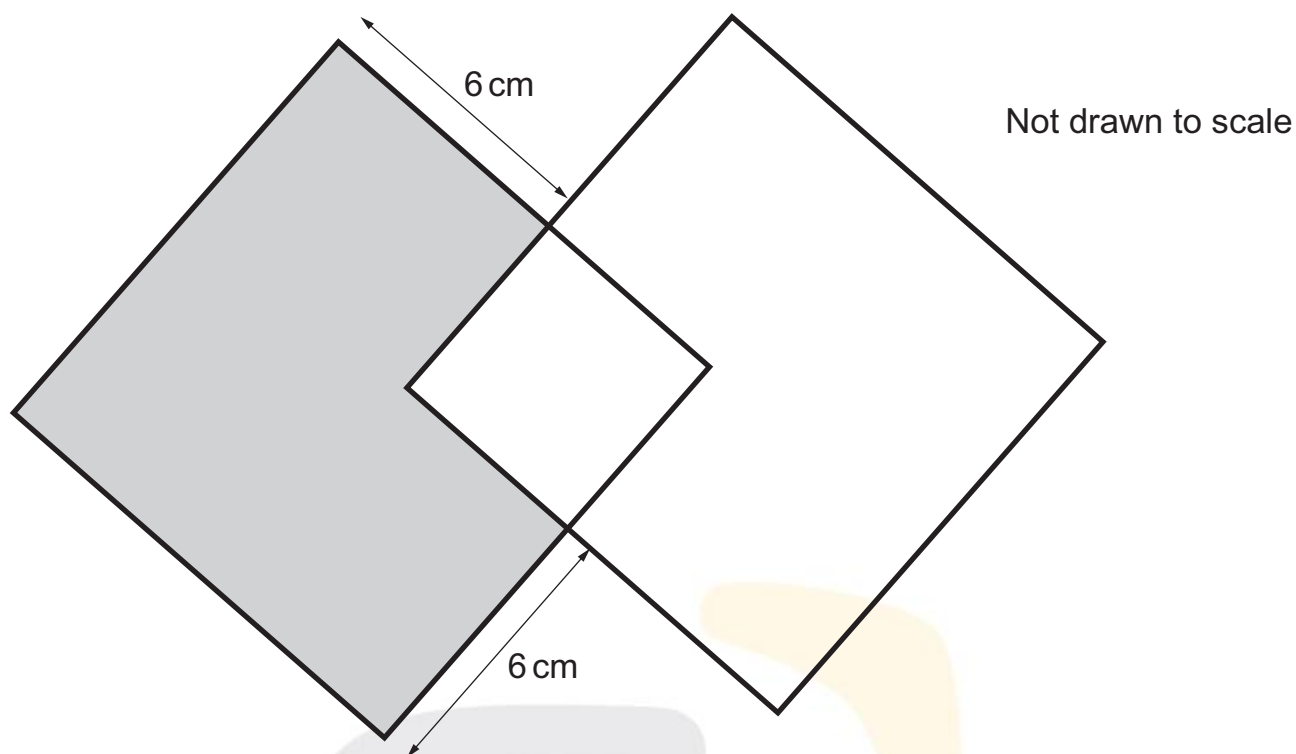
- (b)** Rajiv joins five paving slabs to make a path.



What is the length of the path?

..... metres [1]

- 32** Samira has two squares.
The area of each square is 100 cm^2 .
She overlaps the two squares.



Calculate the shaded area.

..... cm^2 [2]

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