

Cambridge Primary Sample Test

For use with curriculum published in September 2020

Mathematics Paper 1

Stage 5

45 minutes

Name

Additional materials: 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 are **not** allowed to 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 Complete the boxes.

$$500 \times \boxed{} = 1500$$

$$500 = \boxed{} \times 10$$

[1]

- 2 Here is a clock.

06:57:20

Write the time the clock shows five minutes later.



[1]

- 3 Draw a ring around **four** numbers that have a total of 37.52

0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
1	2	3	4	5	6	7	8	9
10	20	30	40	50	60	70	80	90

[1]

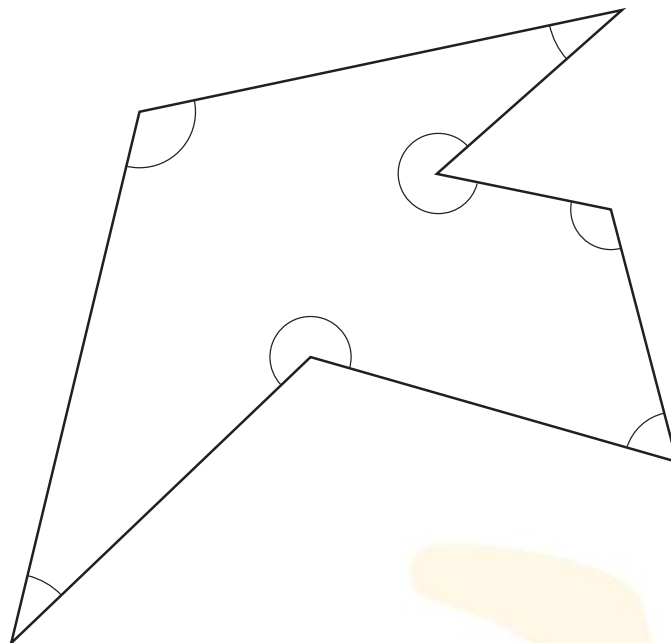
- 4 This sequence decreases by the same amount each time.

Write a number in each box to complete this sequence.

41 29 17 5

[1]

- 5 Tick (✓) all the reflex angles **inside** this shape.



[1]

- 6 Look at this information.

There are floors in a hotel.

Each floor has rooms.

There are rooms in use.

There are rooms not in use.

Write these numbers in the boxes to complete the information.

[1]

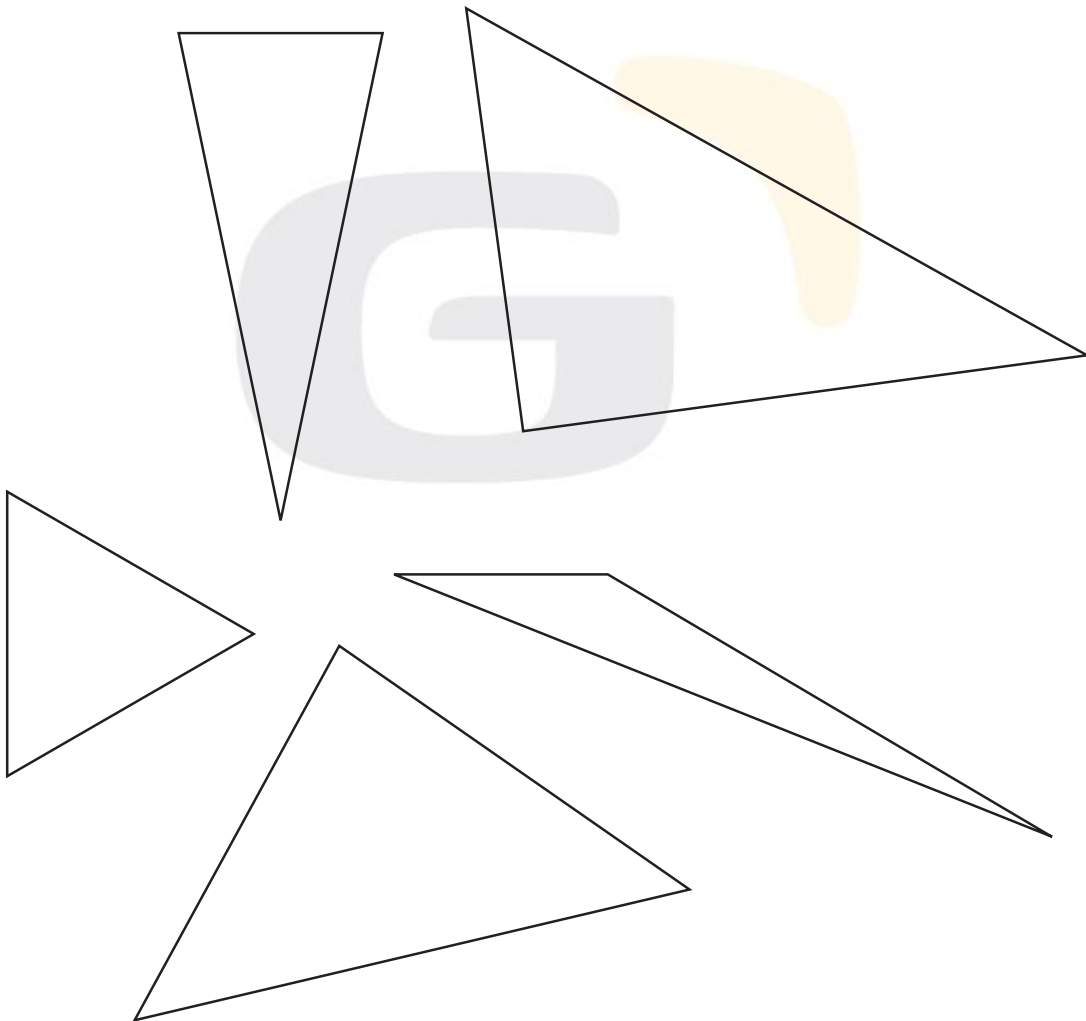
7 Calculate.

Show your working.

$$207 \times 27$$

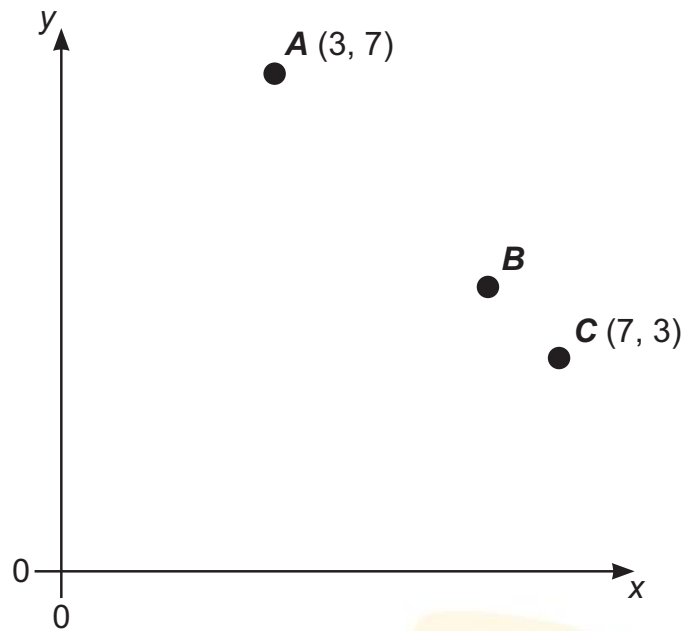
..... [2]

8 Tick (✓) **all** the isosceles triangles.



[1]

- 9 Points **A**, **B** and **C** are on a straight line.



Draw a ring around the correct coordinates for **B**.

(10, 10)

(6, 2)

(10, 4)

(6, 4)

(10, 2)

[1]

- 10 Here are some number cards.

28

-128

-28

Write the two numbers with a total of 0

Write the two numbers with a total of -100

[1]

11 Draw a ring around **all** the numbers that are equivalent to $1\frac{1}{2}$

$$\frac{6}{4}$$

$$\frac{4}{6}$$

$$\frac{10}{15}$$

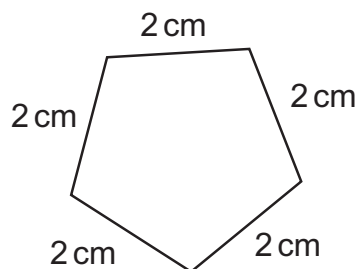
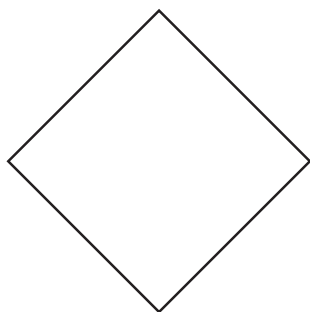
$$\frac{15}{10}$$

$$1\frac{4}{8}$$

$$1\frac{3}{8}$$

[1]

12 Here are a square and a pentagon.



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

Both shapes are polygons.

☐

Both shapes have right angles.

☐

Both shapes have parallel sides.

☐

Both shapes are regular.

☐

[1]

13 There are 20 fruit trees in a garden.

Two fifths of the trees are apple trees.
The others are pear trees.

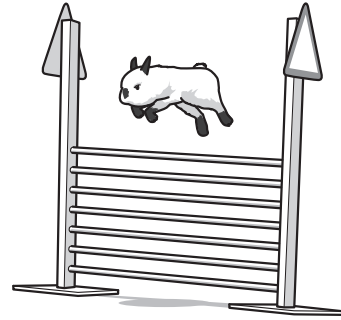
How many pear trees are there?

..... pear trees [1]

14 Rabbits take part in a high jump competition.

Here are the results.

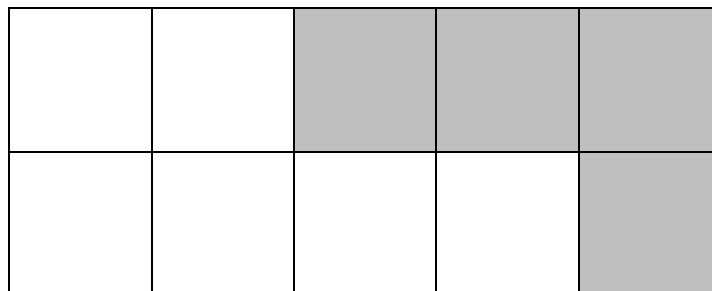
Name of rabbit	Height jumped (centimetres)
Clover	65
Buttercup	80
Carrot top	85
Hoppy	60
Bouncer	90
Pogo	85
Dandelion	75
Thumper	80
Eric	85



What is the mode of the heights jumped?

.....centimetres [1]

15 A proportion of this shape is shaded.



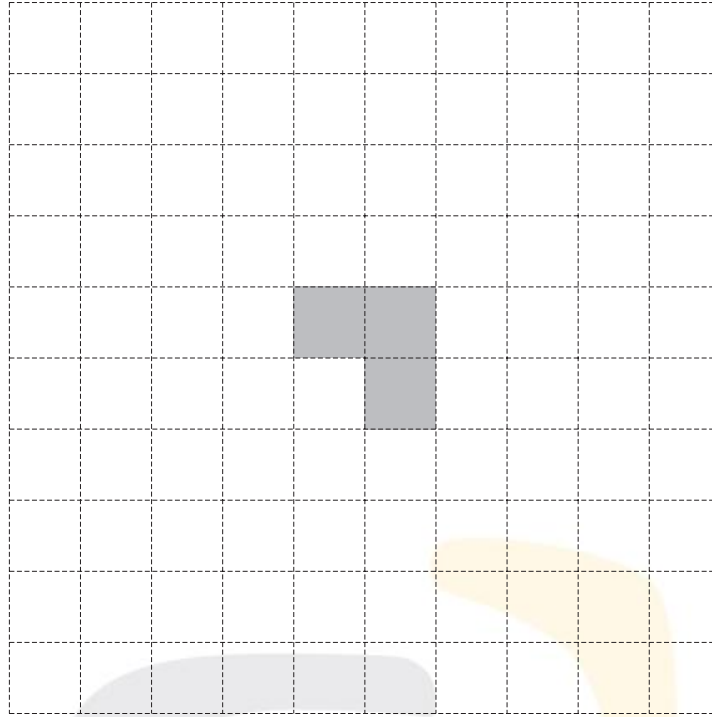
Write a number to complete the sentence.

2 in every squares are shaded.

[1]

16 Translate the shaded shape **three** squares to the right.

Draw the shape in its new position.



[1]

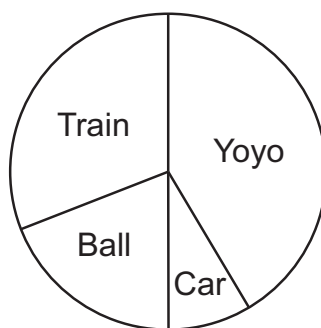
17 ☆ represents a number.

$$\star + 2 + \star + \star = 14$$

Calculate the value of ☆

[1]

18 Chen makes this spinner.



He spins it to choose a toy to play with.

Write the toys in order of likelihood that Chen plays with them.

.....
most likely

.....
least likely

[1]

19 Estimate the answer to each calculation.

Draw a line to match each calculation to the best estimate.

One has been done for you.

$$531 \times 4 =$$

$$5 \times 39 \times 5 =$$

$$37 + 38 \times 39 =$$

$$488 \times 4 + 198 =$$

$$25 \times 42 =$$

Less than 1000

Between 1000 and 2000

Greater than 2000

[2]

20 Lily rolls a fair 1–6 dice.

Draw lines to match all the pairs of statements that have the same likelihood.

Lily rolls 4, 5 or 6

Lily rolls 1

Lily rolls 0

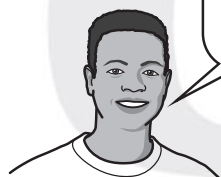
Lily rolls an odd number

Lily rolls 6

Lily rolls 7

[1]

21 Oliver is thinking of two numbers.



They are both whole numbers.
One number is one third of the
other number.
The sum of the numbers is 16

Write the numbers Oliver is thinking of.

..... and [1]

22 Mia makes pastry.

She uses half as much butter as flour.
She uses 450 grams of flour.

How many grams of butter does Mia use?

Draw a ring around **all** the calculations that give the correct answer.

$$450 \times 2$$

$$450 \times \frac{1}{2}$$

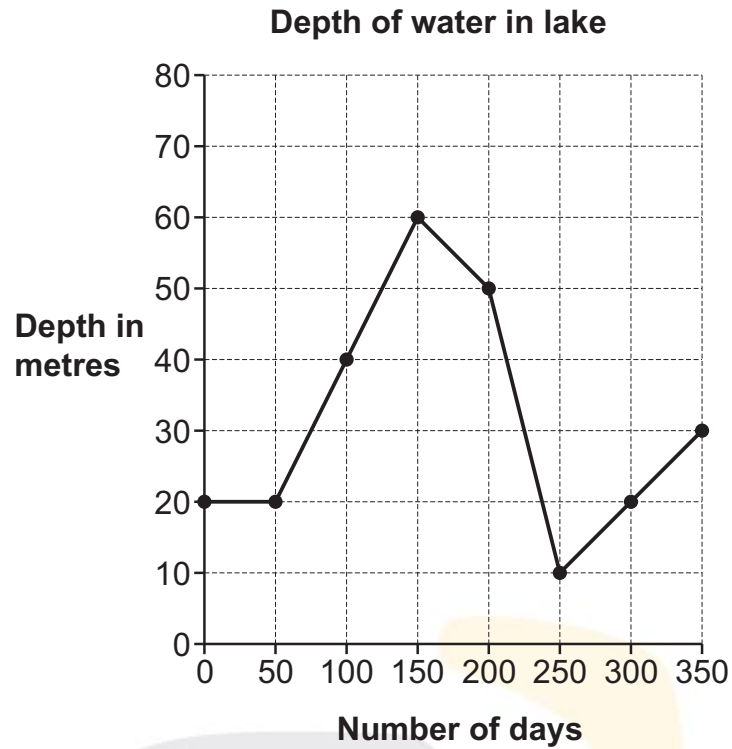
$$450 \div \frac{1}{2}$$

$$450 \div 10$$

$$450 \div 2$$

[1]

23 This graph shows the depth of water in a lake.



(a) Write the greatest depth of water shown on the graph.

..... metres [1]

(b) Use the graph to complete the sentence.

It takes days for the depth of water to change from 60 metres to 10 metres.

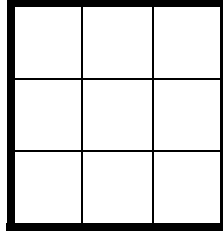
[1]

24 Tick (✓) **all** the numbers that round to 5

4.3	4.5	4.7	4.9	5.1	5.3	5.5
-----	-----	-----	-----	-----	-----	-----

[1]

- 25** Eva has 9 square tiles.
She joins **all** her square tiles to make a large square.



- (a)** Tick (✓) the names of the children who can join **all** of their square tiles to make a large square.

One has been done for you.

Name	Number of tiles	Can join <u>all</u> of their square tiles to make a large square
Eva	9	✓
Gabriella	4	
Safia	15	
Angelique	33	
Anastasia	64	

[1]

- (b)** Jamila says,

‘I can join all of my square tiles to make a **different** large square.’

Complete the sentence.

Jamila has tiles. [1]

- 26** A teacher has \$497.50
She buys 10 bats and 1 ball.

Bats cost \$42.50 each.

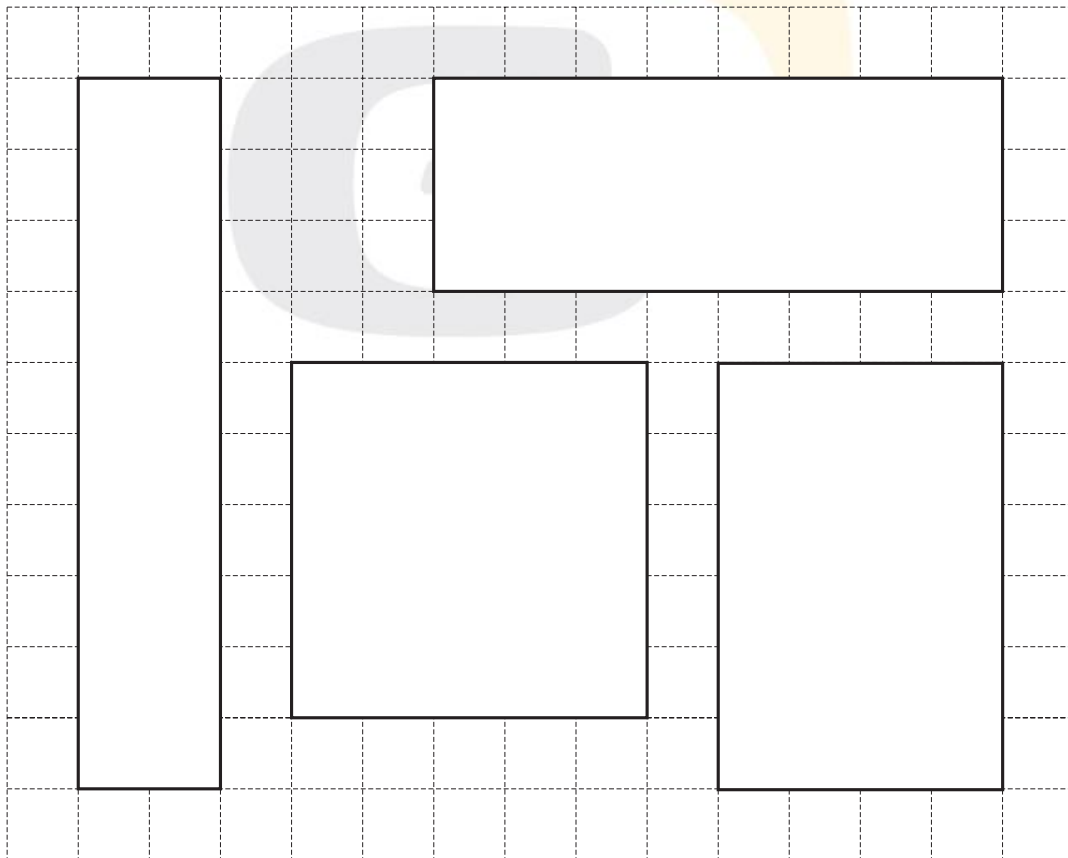
Balls cost \$7.75 each.

How much money does she have left?
Show your working.

\$ [2]

- 27** Here are **four** rectangles drawn on a grid of centimetre squares.

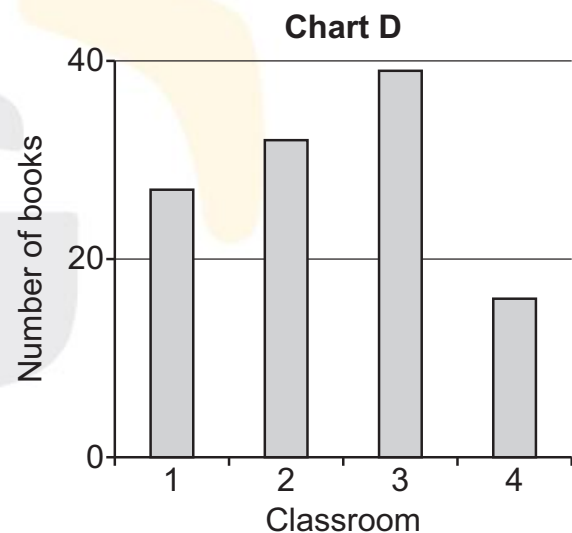
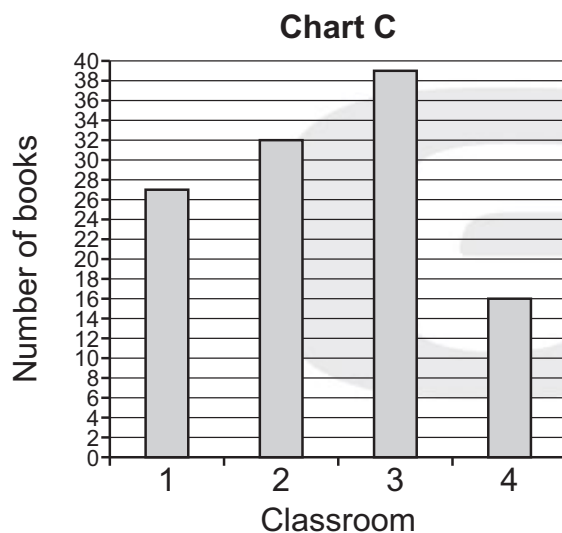
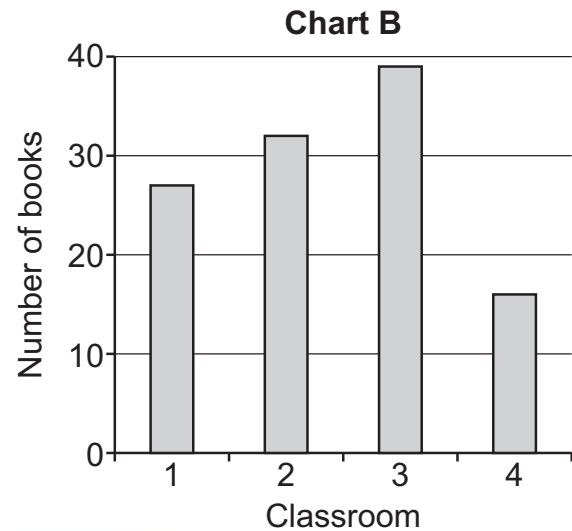
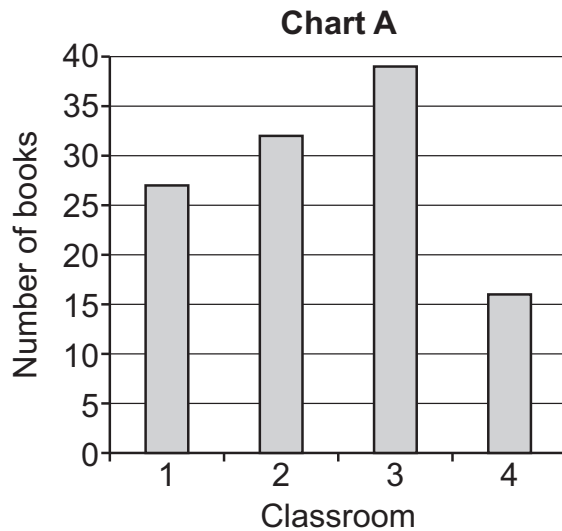
Tick (✓) the rectangle with an area of 24 cm^2 and a perimeter of 20 cm.



[1]

28 Rajiv counts the number of reading books in each classroom.

He shows the results in four different bar charts.



Rajiv uses one of the bar charts to work out the total number of books.

Which is the best chart to use?
Explain your answer.

Chart because

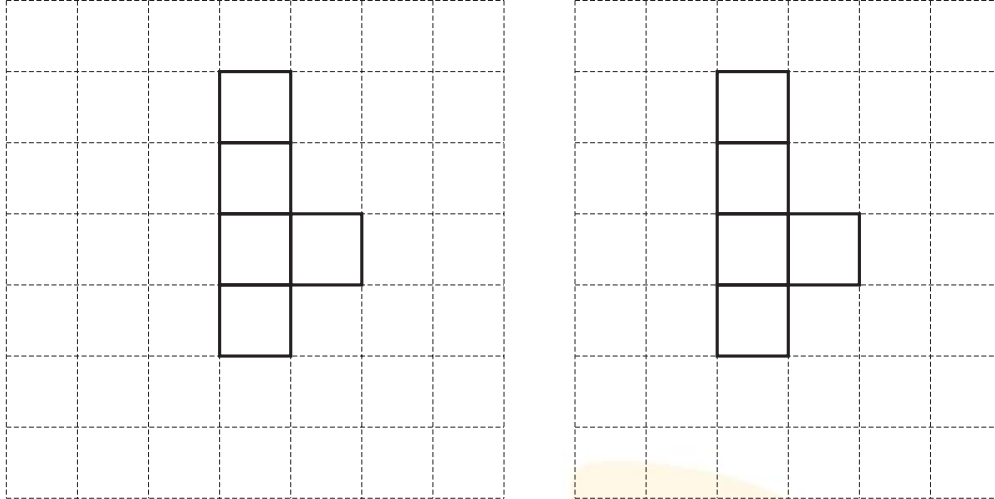
.....

[1]

29 Here are two nets of an open cube.

Draw **one** more square on each net to make **two** nets of a closed cube.

Make each net different.



[1]

30 This table shows the results for a 100 metre race in the Olympics.

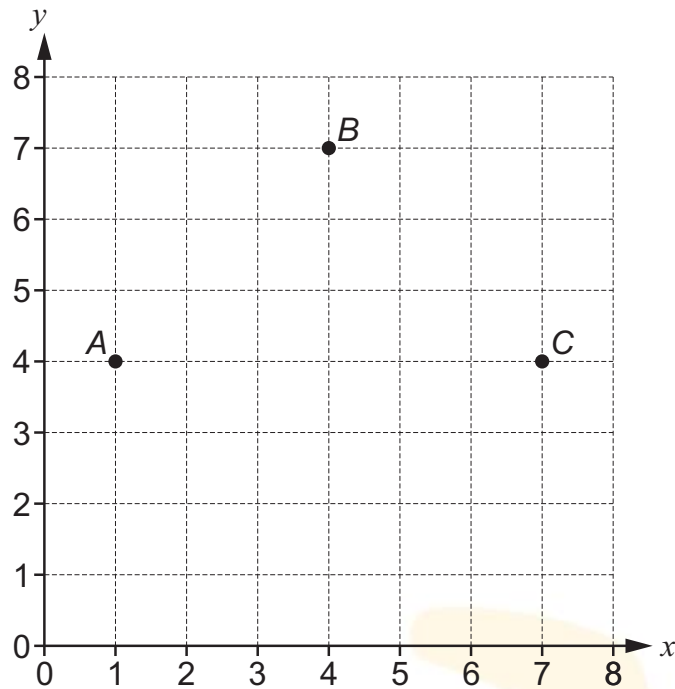
Country	Time (seconds)
Ivory Coast	10.86
United States	10.94
Jamaica	10.71
Trinidad and Tobago	10.92
Great Britain	10.83
Netherlands

The Netherlands took one tenth of a second longer than the winner.

Complete the time for the Netherlands.

[1]

31 Here are some points on a grid.



A, **B**, **C** and **D** are the vertices of a square.

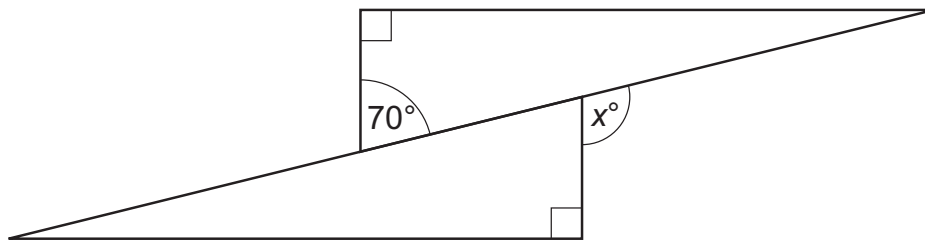
Write the coordinates of **D**.

(..... ,) [1]

32 Here is a shape made from two **identical** triangles.

Calculate the value of x .

Not drawn to scale



$x =$ [1]

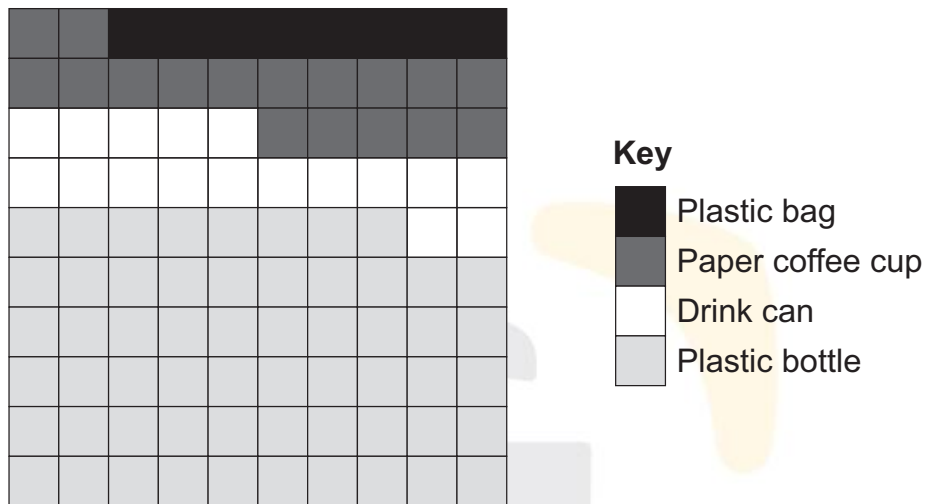
33 Draw a ring around the number closest in value to -1

-1.1 -0.9 -0.91 -1.01 -1.11

[1]

34 Class 5 picks up litter in the local park.

This waffle diagram shows the type of litter they pick up.



Look at the information shown in the waffle diagram.

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

They pick up the same number of drink cans as paper coffee cups.

☐

All the plastic bottles they pick up are the same size.

☐

58% of the rubbish is plastic bottles.

☐

They pick up 17 paper coffee cups.

☐

[1]

- 35 Naomi uses digit cards to show a calculation.
She turns two of the cards over.

	6	3	
			+
	6	8	
5	3	1	

Naomi says,

‘You **cannot** be sure what the numbers are on the cards I turned over.’

Explain why Naomi is correct.

.....

.....

....., [1]