

Year 5 Optional SATs

Mathematics

2003

35 min

35 marks

1. Write the missing numbers in this sequence.



64

32

16

4

1 mark

2.



A bag has **90** marbles in it.

4 children take **20 marbles each**.

How many marbles are left in the bag?

A small pencil icon is positioned at the top-left corner of a horizontal rectangular box, indicating where to write the answer.

1 mark

3. Jack leaves for school at this time.



It takes him **40 minutes** to get to school.

Tick (✓) the time Jack gets to school.











1 mark

4. Write what the missing numbers could be.

$$\text{✎} \boxed{} \times \boxed{} = 150$$

1 mark

5. Write in the missing numbers.

One has been done for you.



rounded to the nearest
whole number is



6.01



6

9.51



7.75



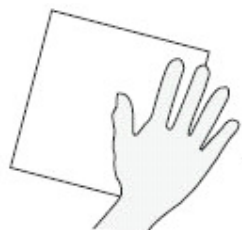
1 mark

6. Here are some **regular** 2-D shapes.

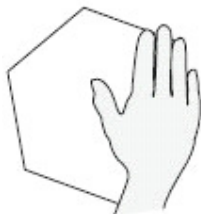
A hand hides part of each one.

Match each **regular** shape to its name.

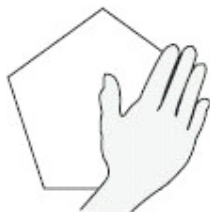
One has been done for you.



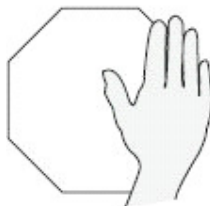
pentagon



square



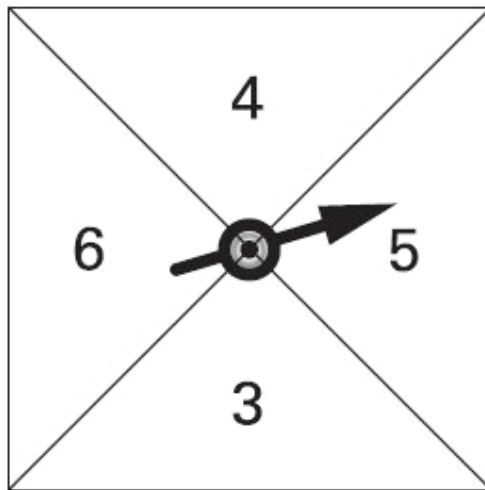
octagon



hexagon

1 mark

7. Geeta has this spinner.



What is her chance of spinning the numbers in the boxes below?
Match each box to the correct word.

One has been done for you.



an odd number

certain

2

impossible

**a number
less than 10**

even chance

likely

1 mark

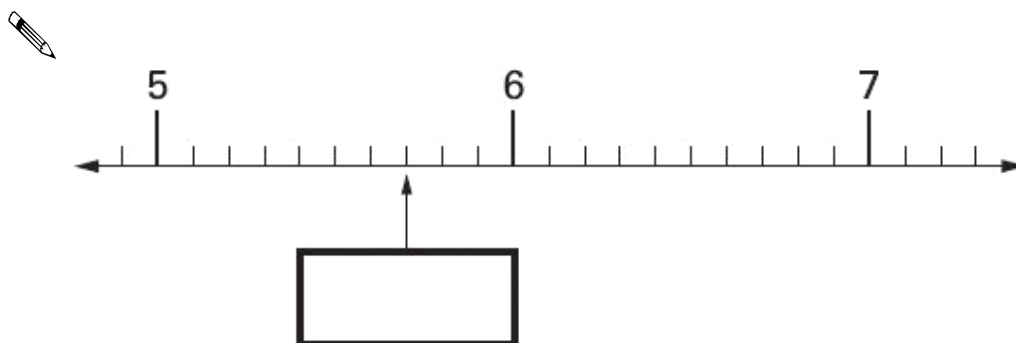
8. Write in the missing number.

 160 \div = 8

1 mark

9. Here is part of a number line.

Write the **missing** number in the box.

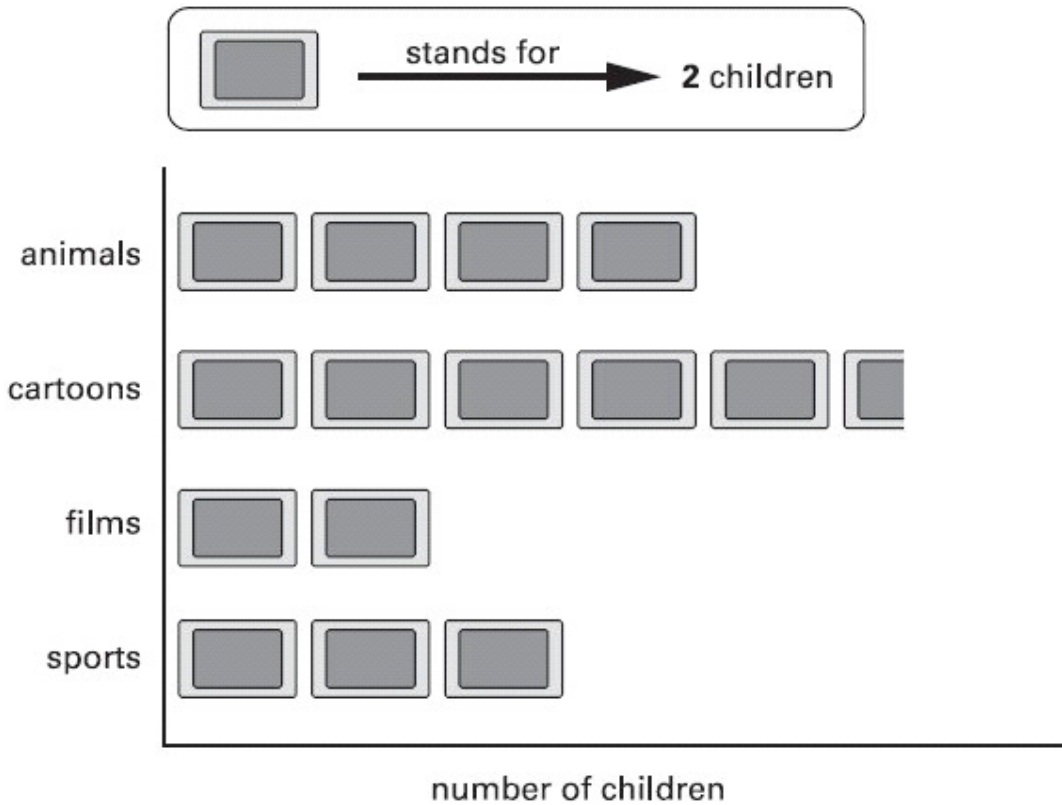


1 mark


10. Kiz asked each child in his class,

'What kind of television programme do you prefer to watch?'

Here are his results.



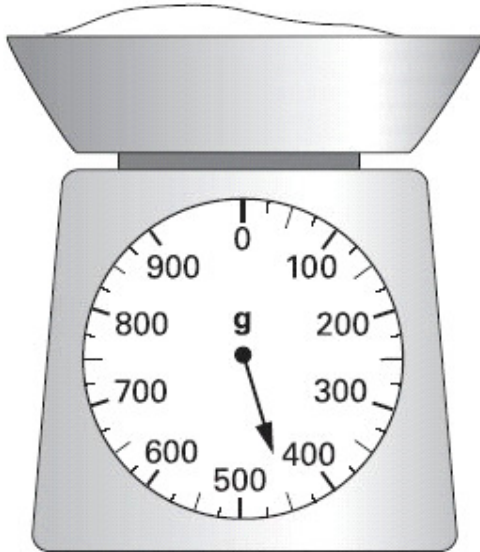
How many **more** children prefer to watch cartoons than films?



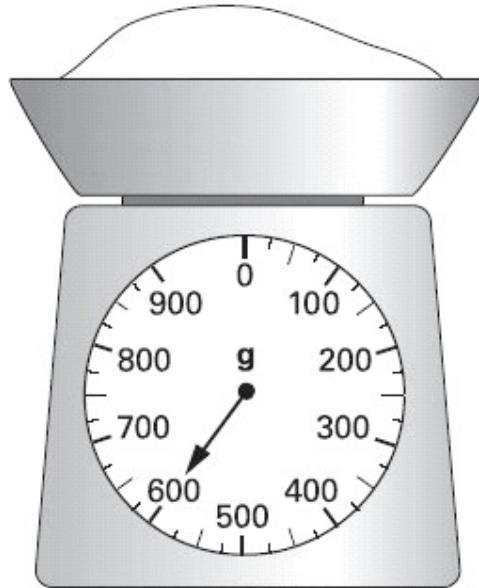
1 mark

11. Emily is making a cake.

She puts flour on the scales.



She then adds sugar to the flour.



How much sugar does she add?




Show
your **method**.
You may get
a mark.

➔

g

2 marks

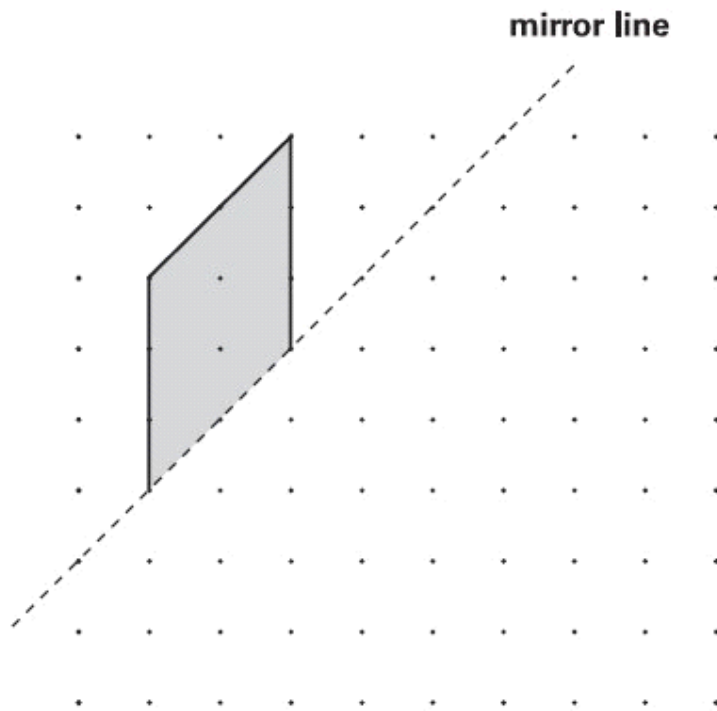
12. Write what the missing numbers could be.

 120 = 100 + (-)

1 mark

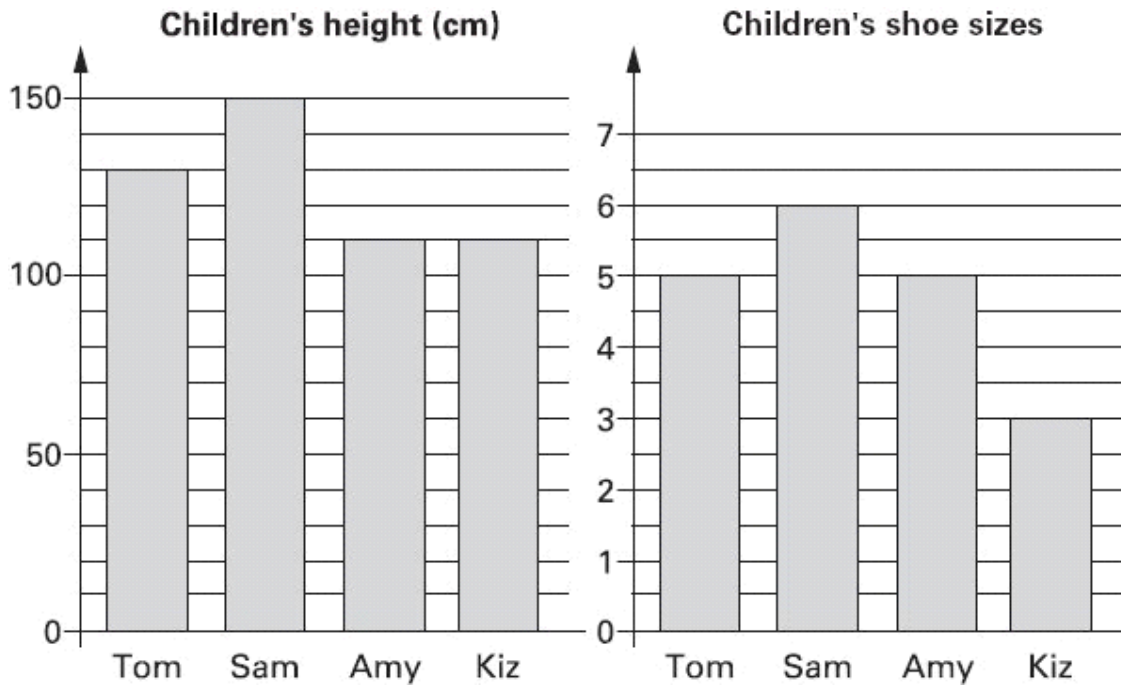
13. Draw the **reflection** of the shape in the **mirror line**.

Use a ruler.



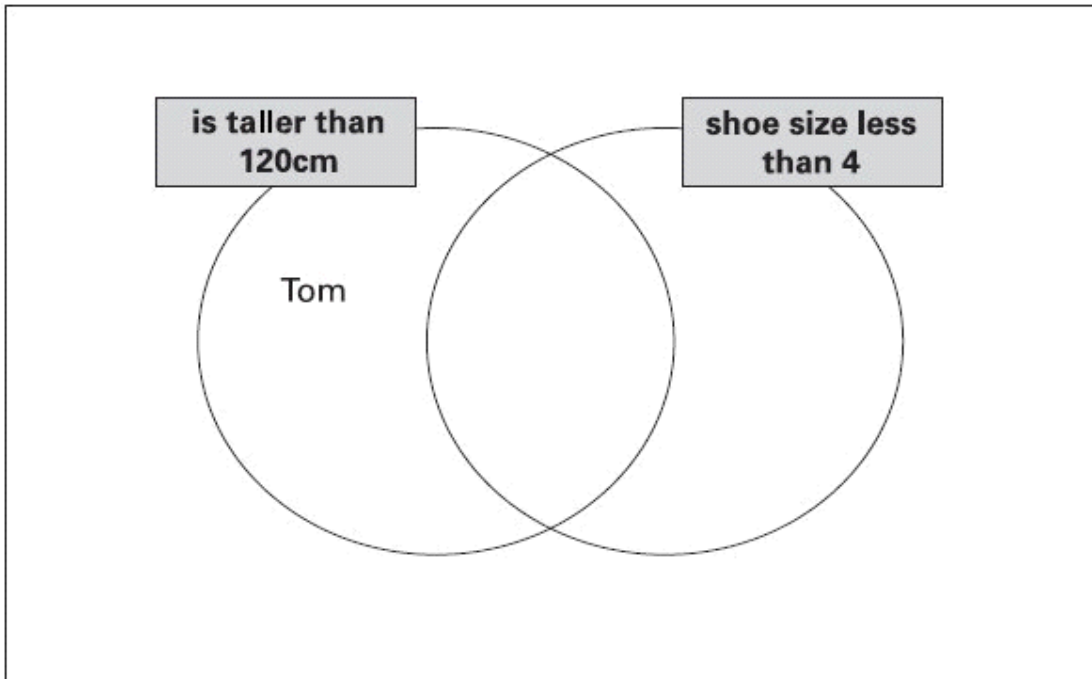
1 mark

14. These graphs show data about Tom, Sam, Amy and Kiz.



Use this data to write each child's name in the correct region on the Venn diagram.

One has been done for you.



2 marks

15. Here are four digit cards.



Write in **three** of the digits to make **the total nearest to 1000**

$$650 + \boxed{} =$$

1 mark

16. A car costs **more** than **£8600** but **less** than **£9100**

Tick (✓) the prices that the car could cost.



£8569

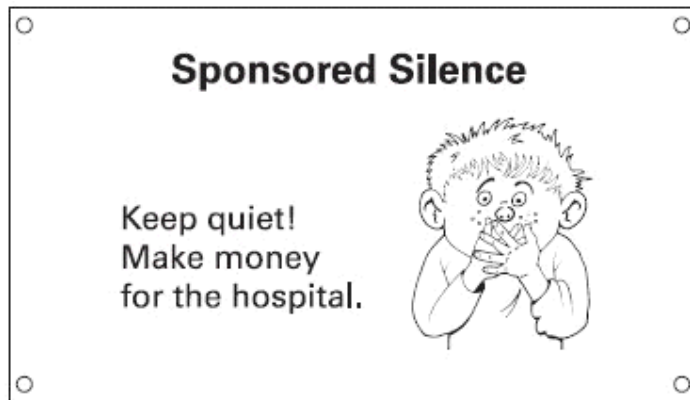
£9090

£9130

£8999

1 mark

17. Two children take part in a sponsored silence.





Laura

'I kept quiet from 10:30 to 10:35 in the morning. I got £3.42 a minute.'



Carl

'I kept quiet for half an hour. I got 35p a minute.'

How much money did each child get?

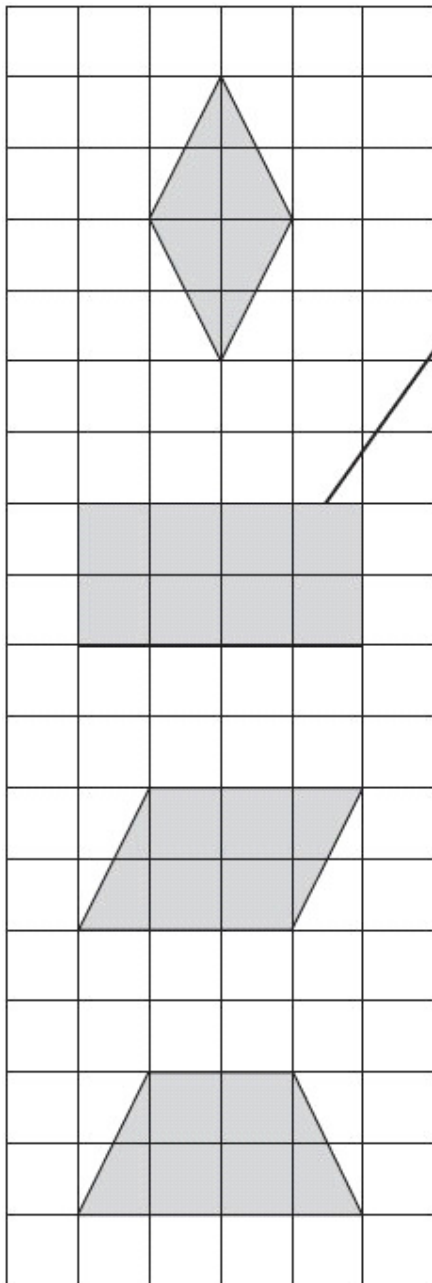
 Laura £

Carl £

2 marks

18. Match each quadrilateral to the correct description.

One has been done for you.



2 pairs of sides equal in length.
4 right angles.

Only 1 pair of parallel sides.

Opposite sides are parallel.
It has no lines of symmetry.

4 sides of equal length.
Opposite angles are equal.

1 mark

19. Here is part of a number square.

The shaded numbers are part of a sequence.

113	114	115	116
123	124	125	126
133	134	135	136
143	144	145	146

Explain the rule for the sequence.



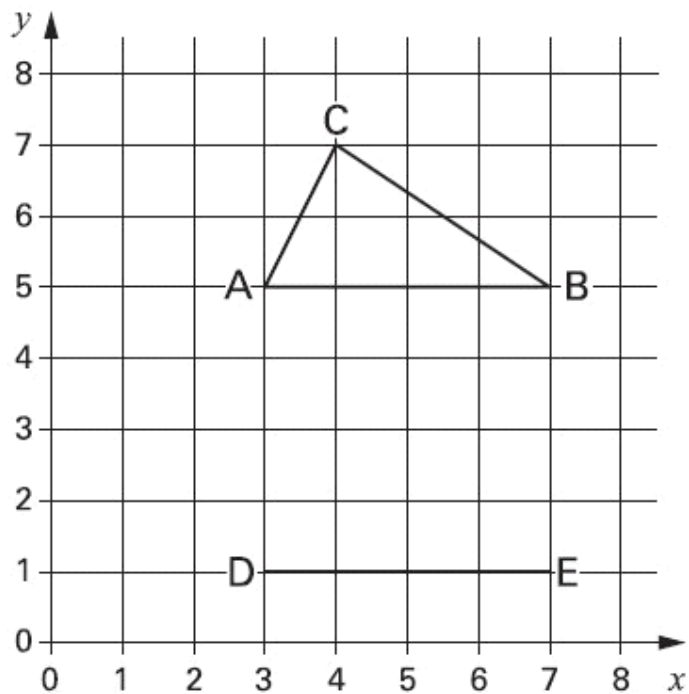
.....

.....

.....


1 mark

20. Kyle has drawn triangle **ABC** on this grid.



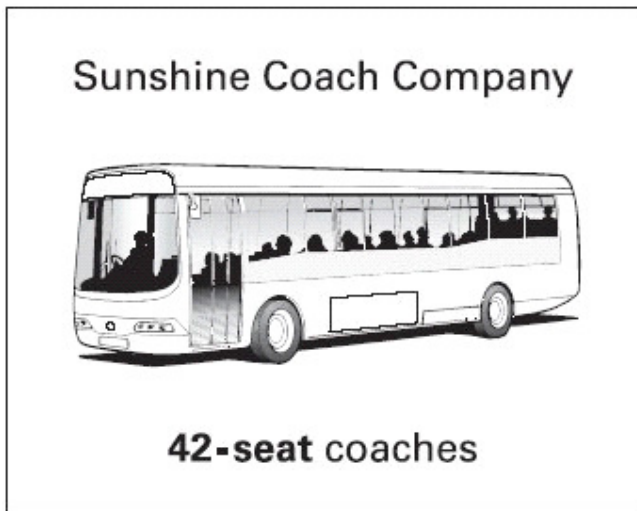
Holly has started to draw an **identical** triangle **DEF**.

What will be the coordinates of point **F**?



1 mark

21.



272 children and 26 adults from Hill School go on a coach trip.

How many **42-seat** coaches does the school need to hire?

Show your **working**. You may get a mark.

A large rectangular box for working. On the left side, there is a speech bubble containing the text 'Show your working. You may get a mark.' with an arrow pointing into the box. In the bottom right corner of the box, there is a smaller empty rectangular box for the final answer.

2 marks

22. Circle one amount each time to make these sentences correct.

One has been done for you.

The distance from
London to Manchester is about

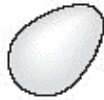
320 cm
320 m
320 km

A tea cup is likely to hold about



15 ml
150 ml
1500 ml

A hen's egg is likely to weigh about



6 g
60 g
600 g

1 mark

- 23.** Jordan, Anna and Ryan collect picture cards.
Cards are worth either **50** points or **100** points.
The table shows the cards they have.

Complete the table for Anna and Ryan.

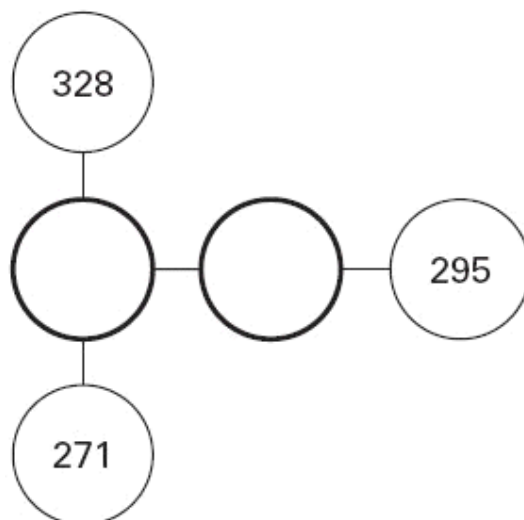


	50 points	100 points	total number of points
Jordon	5 cards	2 cards	450 points
Anna	3 cards	<input type="text"/> cards	550 points
Ryan	4 cards	6 cards	<input type="text"/> points

1 mark

24. The three numbers on **each line** add up to **763**

Write in the missing numbers.



1 mark

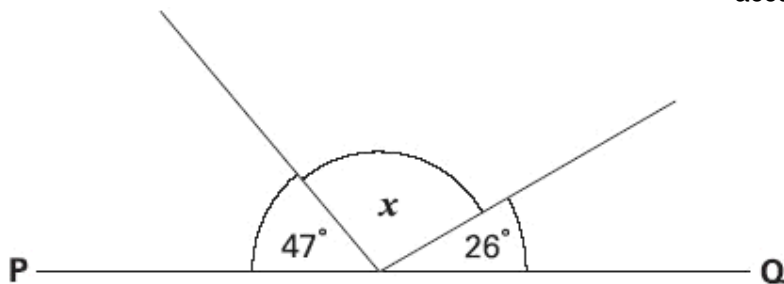
25. Calculate $\frac{1}{5}$ of **325**



1 mark

26. PQ is a straight line.

Not drawn
accurately



Calculate the size of angle X .

Do **not** use a protractor (angle measurer).

1 mark

27. Circle the **two** fractions that are equivalent to **0.6**



$$\frac{6}{10}$$

$$\frac{1}{60}$$

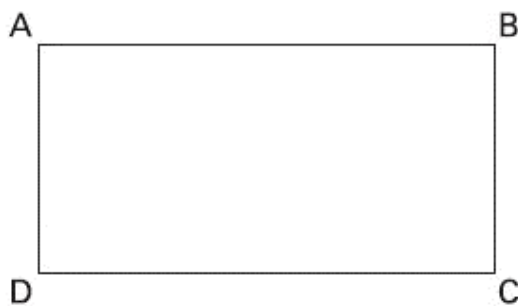
$$\frac{60}{100}$$

$$\frac{1}{6}$$

1 mark

28. Rectangle **ABCD** has a perimeter of **24 centimetres**.

Sides AB and DC are **twice as long** as sides AD and BC.



Not actual size

Calculate the length of side **AD**.

Do **not** use a ruler.

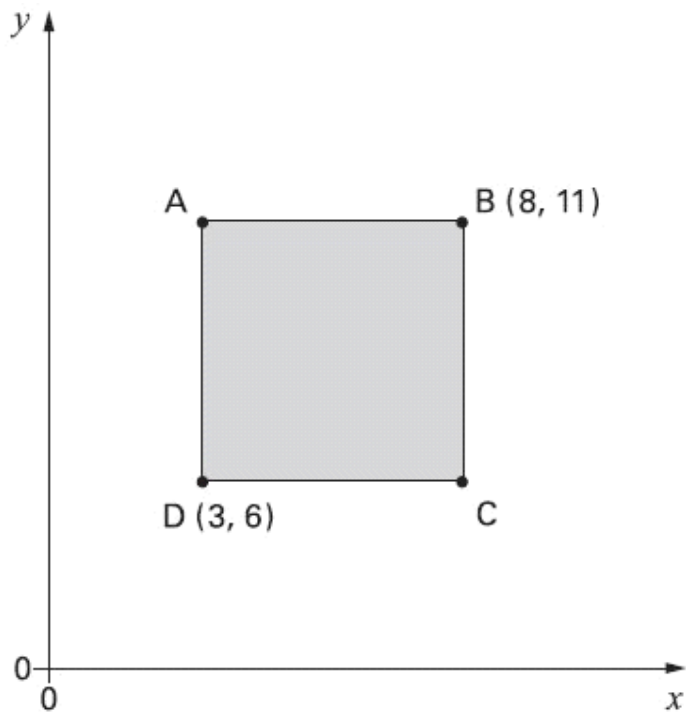
1 mark

29. Write in the missing number.

$$\boxed{17.5} \times \boxed{6} = \boxed{25} \times \boxed{}$$

1 mark

30. Here is a shaded square.



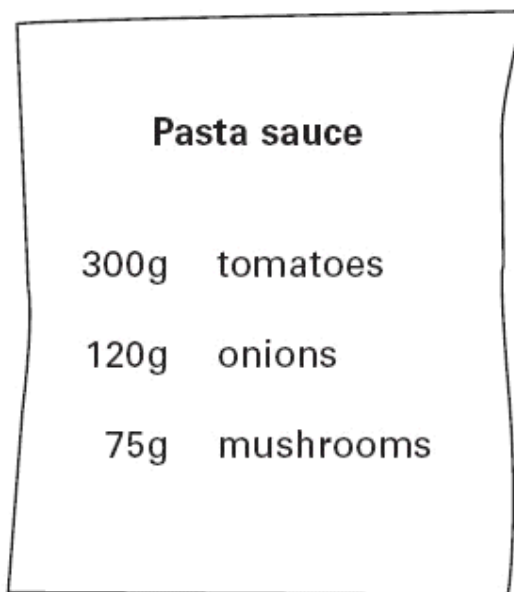
Write the coordinates for point **A**.



A = (,)

1 mark

31. Here is a recipe for pasta sauce.



Josh makes the pasta sauce using **900g** of **tomatoes**.

What weight of **onions** should he use?

g

1 mark