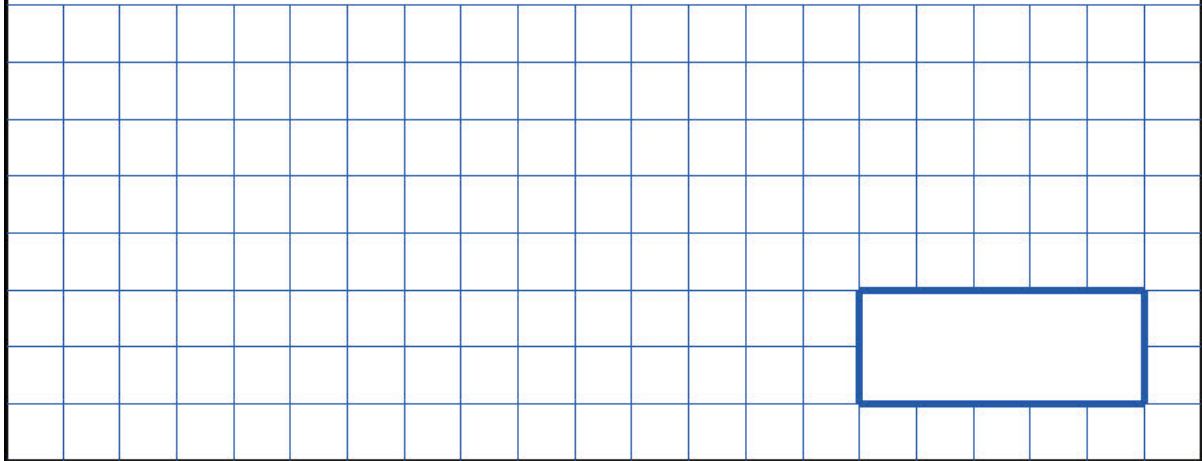


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You may not use a calculator to answer any questions in this test.

3.

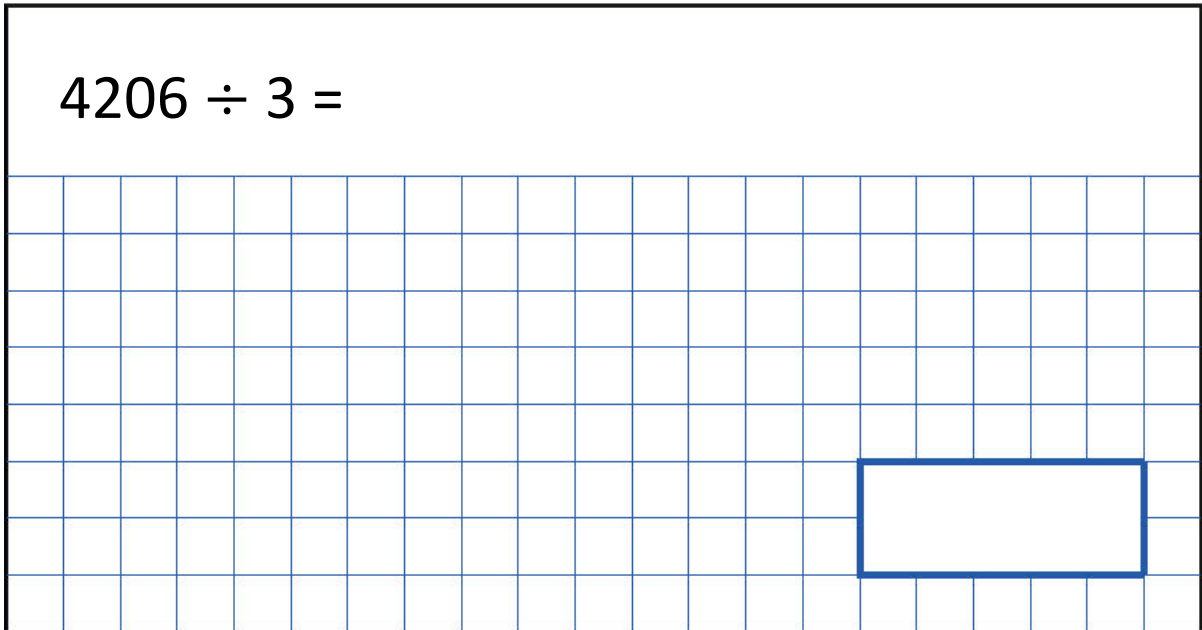
$$345 \times 4 =$$



1 mark

4.

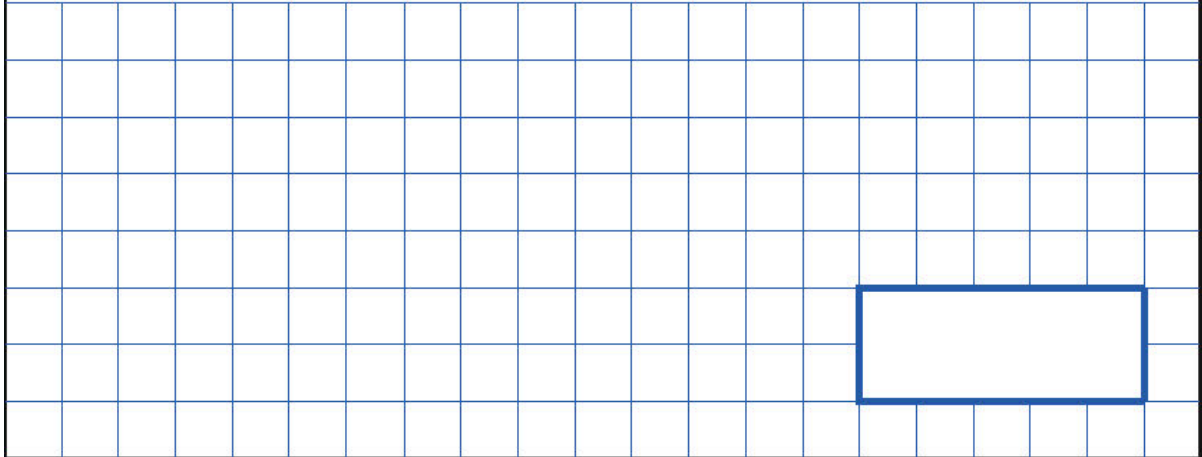
$$4206 \div 3 =$$



1 mark

5.

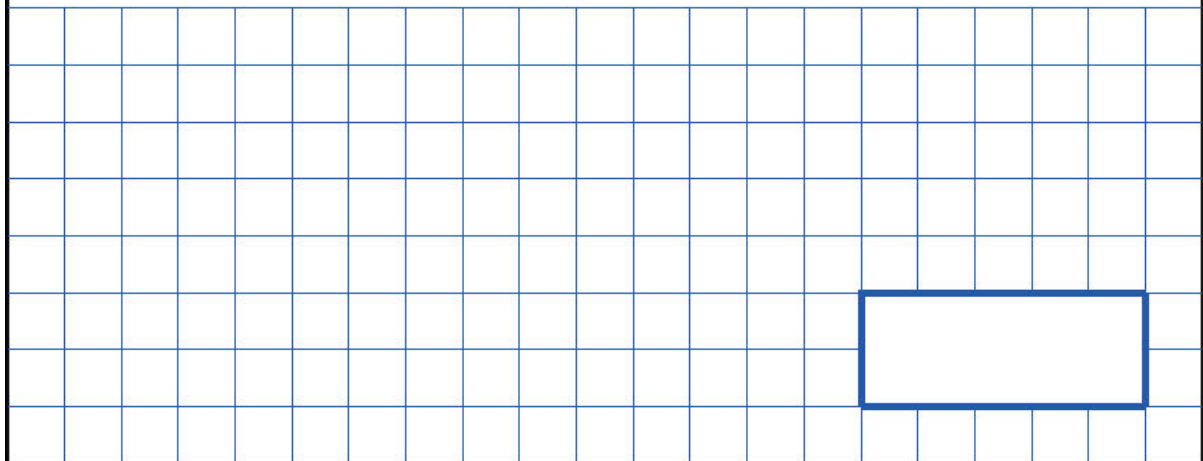
$$16.2 + 9.8 =$$



1 mark

6.

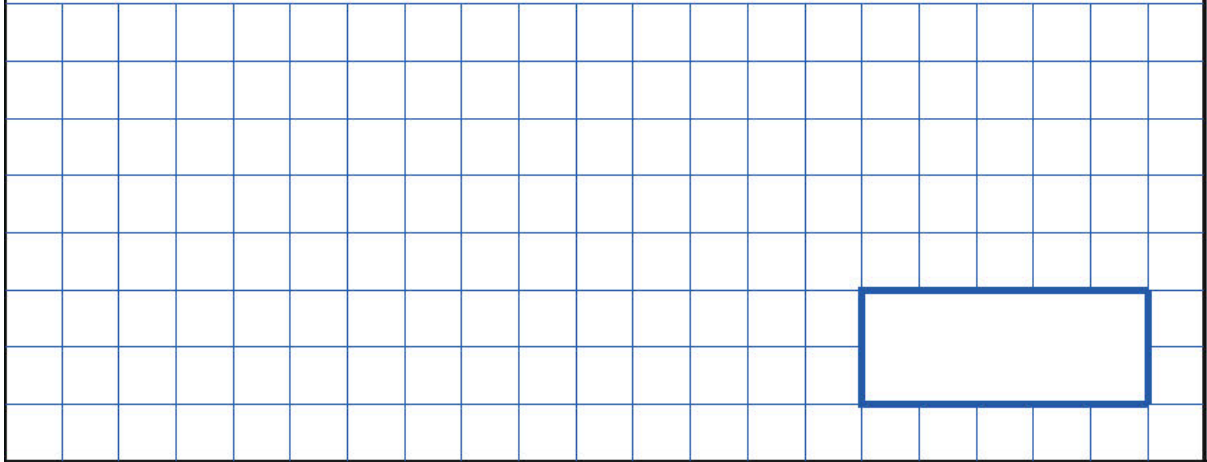
$$\frac{2}{3} \text{ of } \pounds 729 =$$



1 mark

7.

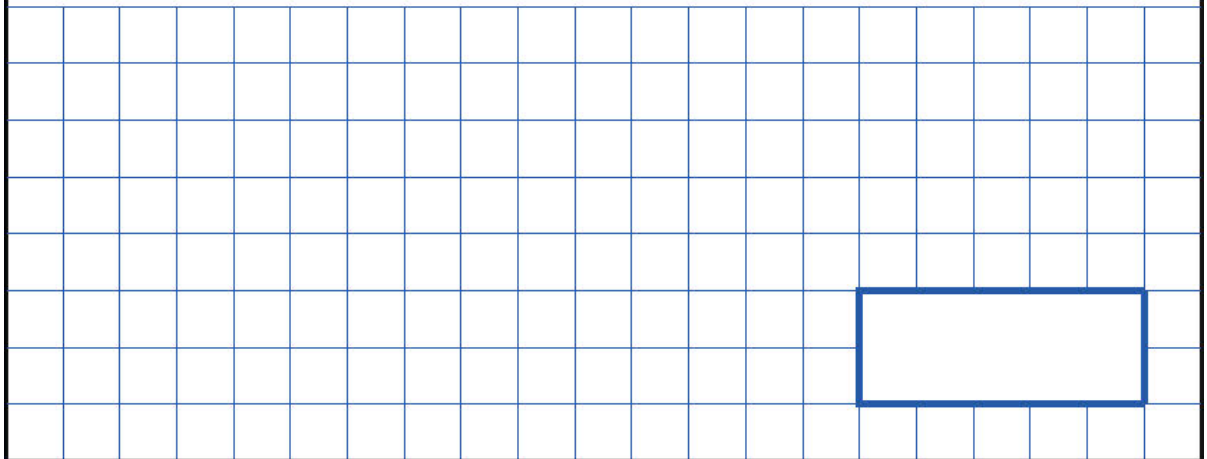
$$608 \times 56 =$$



2 marks

8.

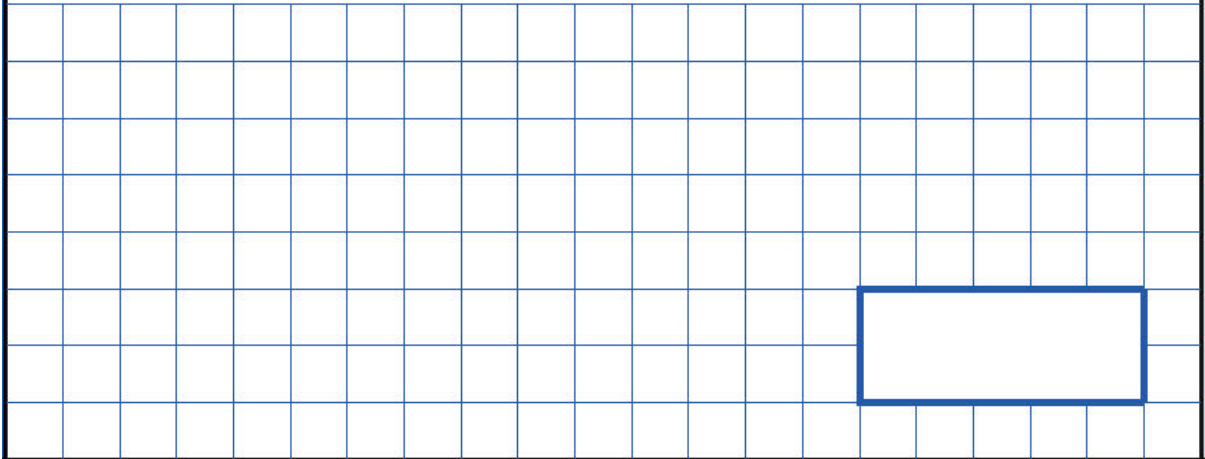
$$45\% \text{ of } 180$$



2 marks

9.

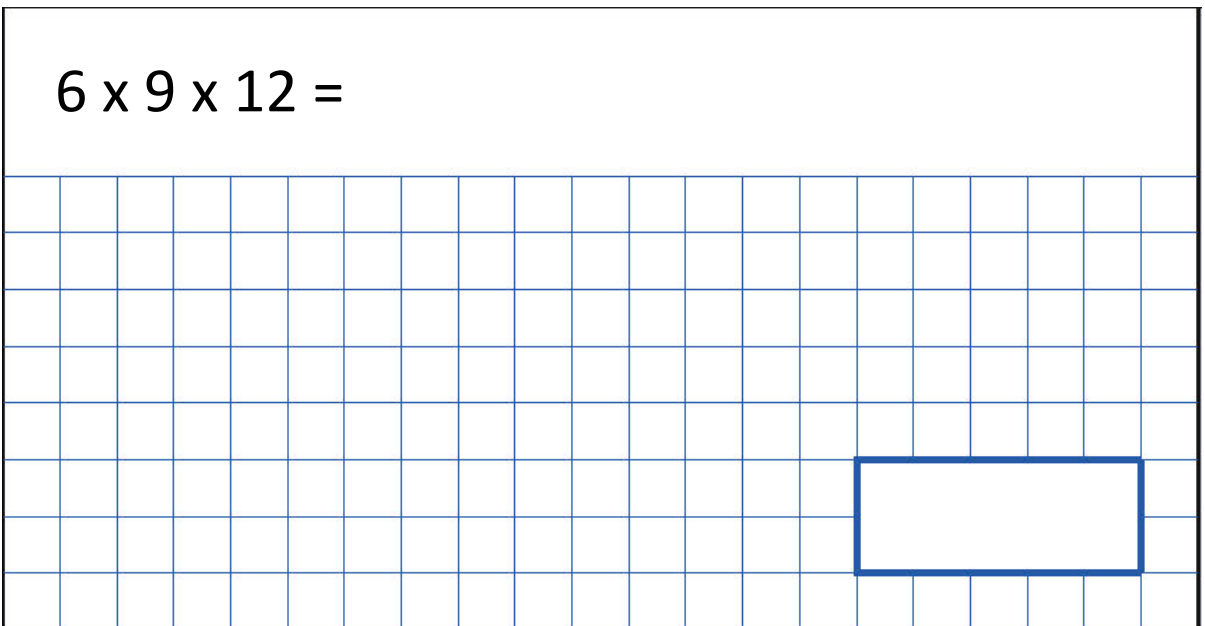
$$15 \div \frac{1}{7} =$$



1 mark

10.

$$6 \times 9 \times 12 =$$



1 mark

Section B: For these questions, show your working in the space provided.

1. 96 pupils and teachers go by minibus to the sports tournament.

How many 15-seater minibuses will be required?

minibuses

1 mark

2. Fill in the missing numbers in the following sequences.

1, 4, _____, 10, 13

0.1, 0.25, 0.4, _____, 0.7

9, 5, 1, _____, -7

3 marks

3. Complete the number sentences using these cards.

$\times 10$	$\times 100$	$\times 1000$
$\div 10$	$\div 100$	$\div 1000$

$$36.55 \quad \boxed{} = 365.5$$

$$0.2 \quad \boxed{} = 0.002$$

$$7800 \quad \boxed{} = 7.8$$

$$47.3 \quad \boxed{} = 4730$$

2 marks

4. Megan makes a sequence of numbers starting with **100**

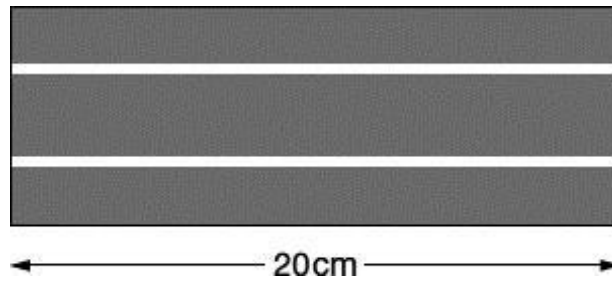
She **subtracts 45** each time.

Write the next **two** numbers in the sequence.

100 55 10

2 marks

5. (a) A straight piece of model car track is 20cm in length.

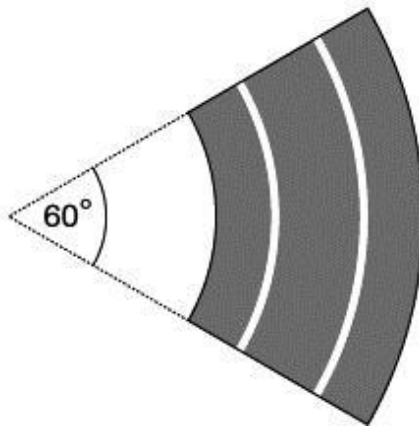


How many of these straight pieces are needed to make a **1.8 metre** track?

.....

1 mark

- (b) A curved piece of track looks like this:

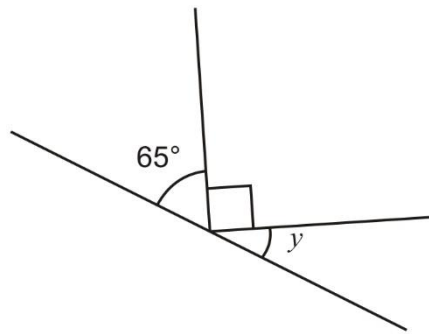


How many of these curved pieces are needed to make a **complete circle** of track?

.....

1 mark

6.



Not to scale

Calculate the size of angle **y** in this diagram.


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

1 mark

7.


Brackets

(a) Work out the answer.

 $2 + (16 \div 2) + 6 = \dots\dots\dots$

1 mark

(b) Put brackets in the calculation below to make it correct.

 $2 + 16 \div 2 + 6 = 4$

1 mark

8. This is a list of the highest temperatures each day for one week.

Day	Temperature
Sunday	- 2°C
Monday	- 1°C
Tuesday	8°C
Wednesday	12°C
Thursday	13°C
Friday	11°C
Saturday	7°C

- a) How many degrees warmer was it on the hottest day than on the coldest day?

 °C

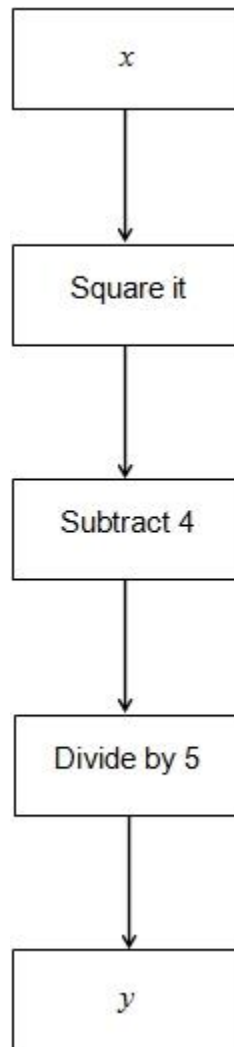
1 mark

- b) The temperature **falls** from 7°C on Saturday by 10°C. What is the new temperature?

 °C

1 mark

9. The number machine shows how to find y when you know x .

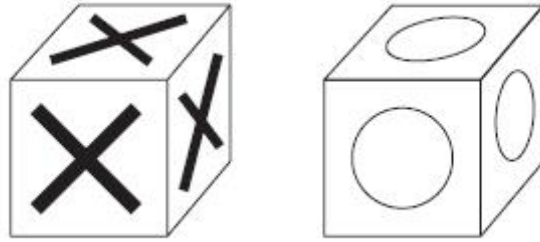


Work out the value of y when $x = 8$

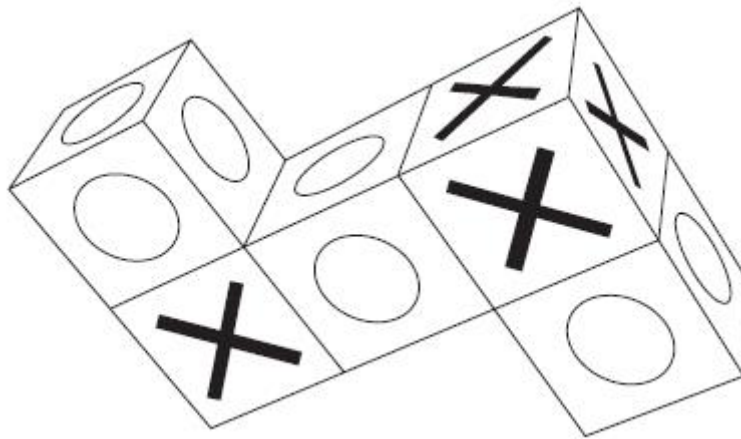
$y =$ _____

1 mark

10. Asif has some cubes with a cross on each face and some cubes with a circle on each face.



He sticks five cubes together to make this shape.



How many crosses and how many circles are there on the **outside** of the shape?

Number of crosses

1 mark

11. (a) I think of a number.

I **double** my number and the answer is **178**

What is my number?

.....

1 mark

(b) I think of a different number.

I **double** my number, then I **double again**.

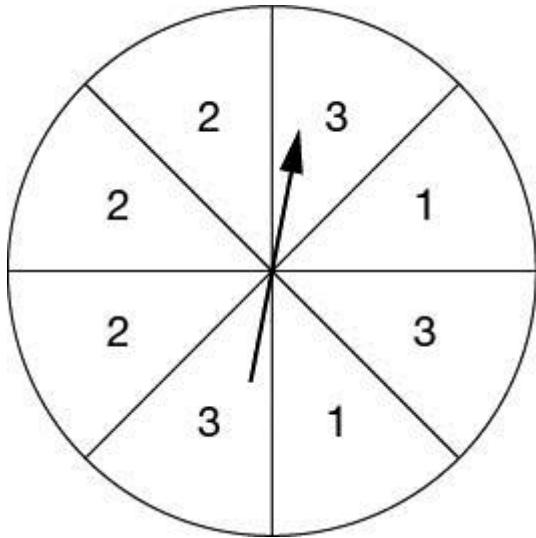
The answer is **312**

What is my number?

.....

1 mark

12. Here is a fair spinner divided into 8 equal sections.



I am going to spin the pointer.

For each statement below, tick (✓) True or False.



True False

I am **equally likely** to spin a 2 as to spin a 3

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

I am **more likely** to spin an even number than an odd number.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

It is **impossible** that I will spin a number less than 2

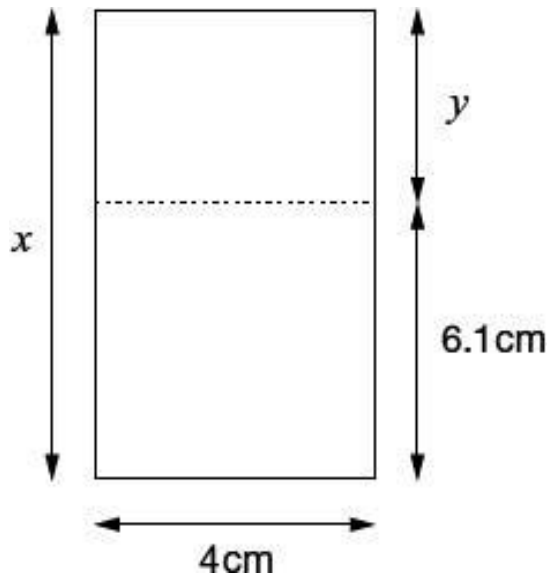
<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

It is **certain** that I will spin a number less than 4

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

2 marks

13. Look at the rectangle.



Not drawn accurately

The **total area** of the rectangle is **40cm²**

Work out lengths x and y

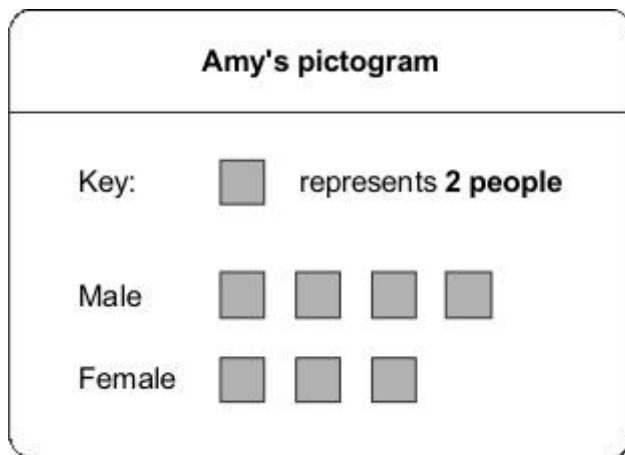
Handwritten mark

$x = \dots\dots\dots$ cm $y = \dots\dots\dots$ cm

2 marks

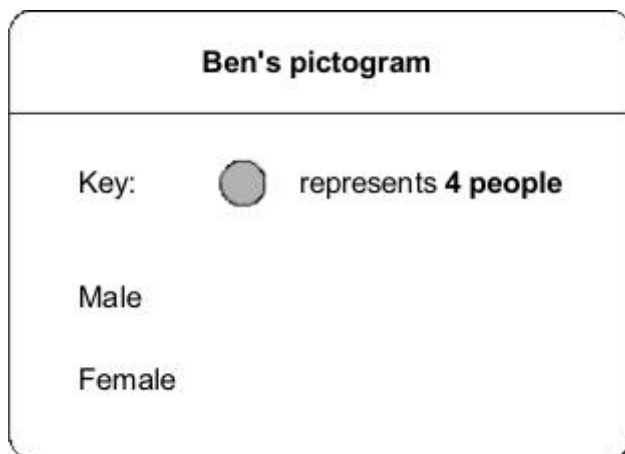
14. Amy and Ben do a survey together.

They each draw a pictogram.



Ben shows the **same** information but uses a **different key**.

Complete Ben's pictogram.




2 marks

15. I am thinking of two numbers.

When I **add** my numbers, the answer is **1**

When I **multiply** my numbers, the answer is **0.09**

What are my numbers?



and

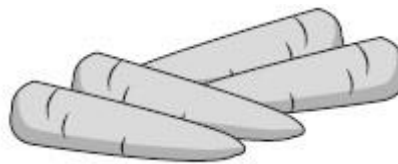
1 mark

16.



potatoes

£1.50 per kg




carrots

£1.80 per kg

Jack buys $1\frac{1}{2}$ kg of potatoes and $\frac{1}{2}$ kg of carrots.

How much **change** does he get from **£5**?



2 marks

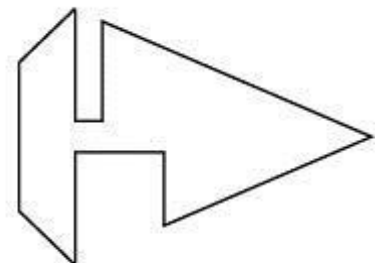
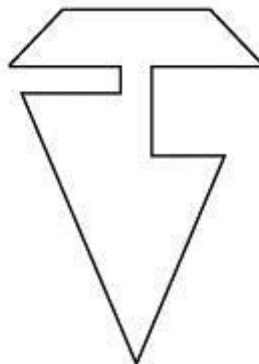
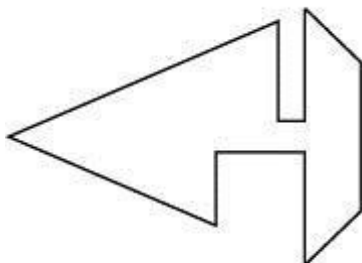
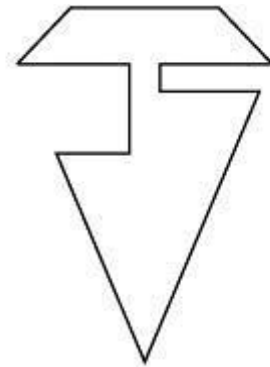
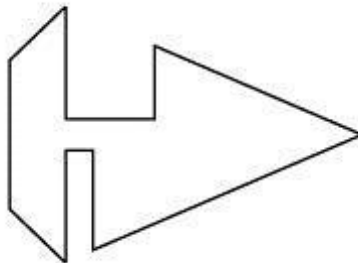
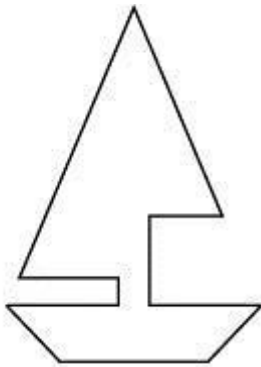
17. Samir has a piece of card that is grey on one side and white on the other.

He cuts out this shape from the card.



He turns over the shape so that the white side is showing.

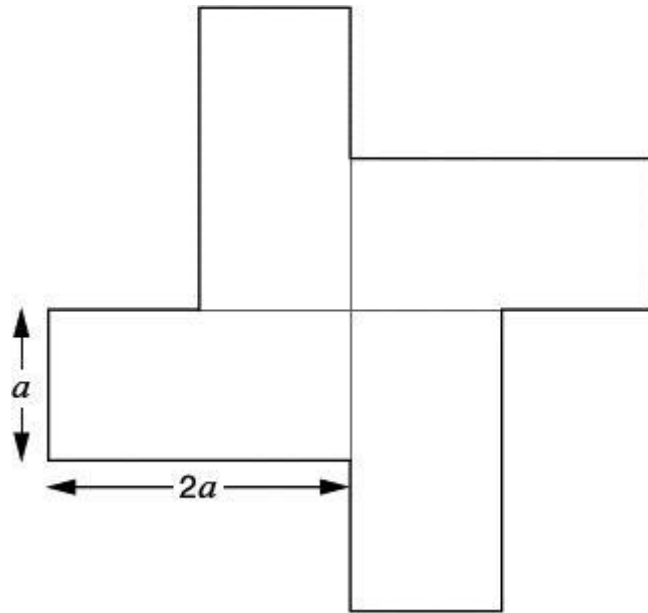
Tick (✓) **all** the shapes below that show the **white** side of Samir's shape.



2 marks

18. This shape is made of four congruent rectangles.

Each rectangle has side lengths $2a$ and a



Not drawn accurately

The **perimeter** of the shape is **80cm**.

Work out the **area** of the shape.

Handwritten scribble

..... cm²

2 marks

19. A bag contains coloured beads.

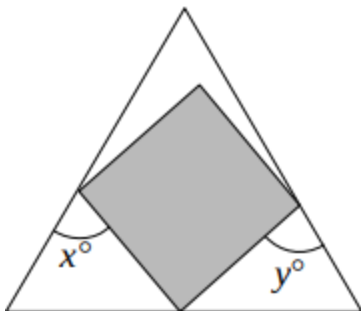
The table shows numbers and fractions of each colour.

Write the missing numbers and fractions in the table.

Colour	Number of beads	Fraction
Blue	12	
Red		$\frac{1}{12}$
Green	4	
Other		$\frac{1}{4}$

2 marks

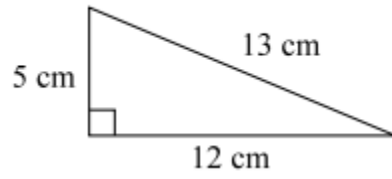
20. The diagram shows a square inside an equilateral triangle. What is the value of $x + y$?



$$x + y = \dots\dots\dots^\circ$$

2 marks

21. Four copies of the triangle shown are joined together, without gaps or overlaps, to make a parallelogram. What is the largest possible perimeter of the parallelogram?



Perimeter =.....cm

2 marks

END OF TEST

Total 50 Marks