

Ma

KEY STAGE

2

LEVELS

3–5

# Mathematics test

## Test B

### Calculator allowed

First name \_\_\_\_\_

Last name \_\_\_\_\_

School \_\_\_\_\_



For marker's use only

Page	Marks
5	
7	
9	
11	
13	
15	
17	
19	
21	
23	
<b>TOTAL</b>	
<b>Borderline check</b>	

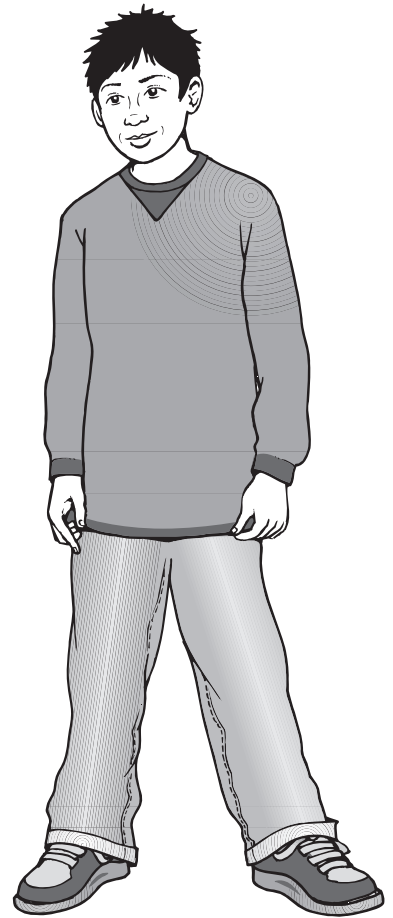
2007



Jamie



Kate



Hassan

# Instructions

You **may** use a calculator to answer any questions in this test.

Work as quickly and as carefully as you can.

You have **45 minutes** for this test.

If you cannot do one of the questions, **go on to the next one**.

You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

**Follow the instructions for each question carefully.**



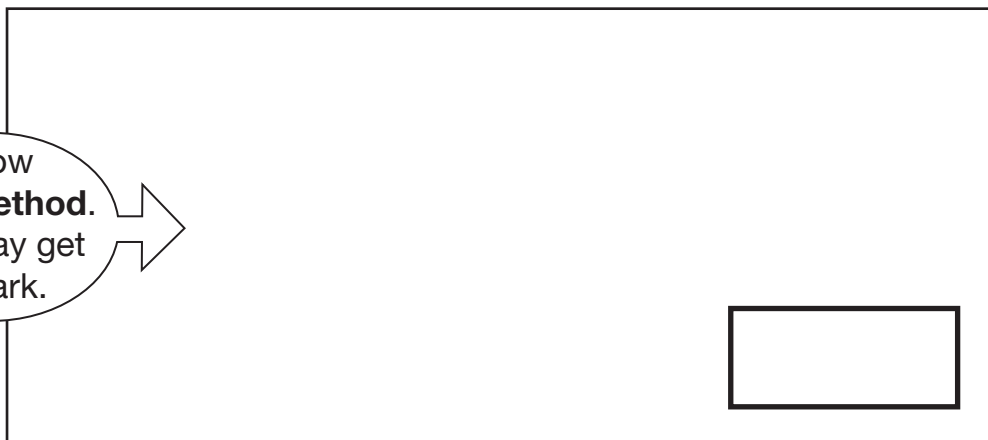
This shows where you need to put the answer.

If you need to do working out, you can use any space on a page.

**Some questions have an answer box like this:**



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



The diagram shows a large rectangular box representing an answer box. To the left of this box is a smaller oval containing the text 'Show your method. You may get a mark.' with a large arrow pointing to the right towards the main box. In the bottom right corner of the main box, there is a smaller, empty rectangular box representing a space for the final answer.

For these questions you may get a mark for showing your method.

1

Circle the number that is **closest to 250**



261

246

255

209

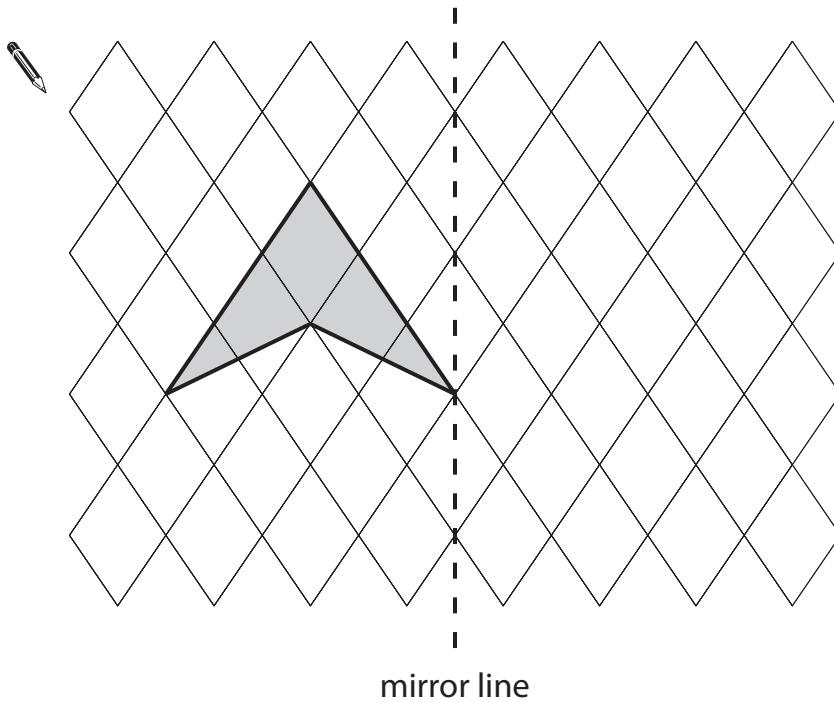
275

1  
1 mark

2

Draw the reflection of the shaded shape in the mirror line.

Use a ruler.



2  
1 mark

3

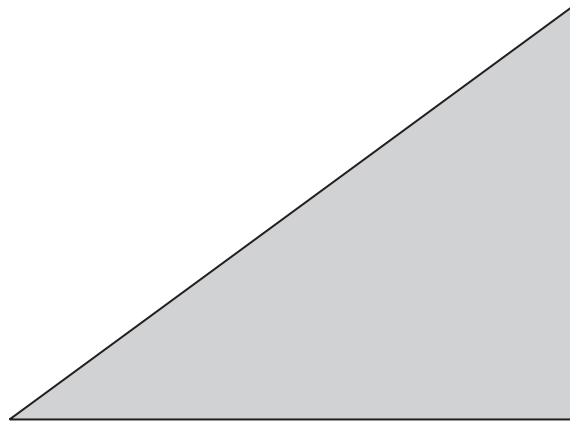
The sum of two numbers is 100

Write in the missing digits.

  $\begin{array}{|c|c|} \hline 3 & \square \\ \hline \end{array} + \begin{array}{|c|c|} \hline \square & 3 \\ \hline \end{array} = \begin{array}{|c|c|c|} \hline 1 & 0 & 0 \\ \hline \end{array}$

3  
1 mark

4



Measure accurately the length of the **shortest** side of this triangle.

Write your answer in centimetres.



4  
1 mark

5

Some children were asked to choose their favourite animal in the zoo.

This table shows the results.

	Girls	Boys
zebra	9	3
lion	4	9
giraffe	7	4
monkey	8	7
elephant	6	5

How many more girls than boys chose giraffes?



5a

1 mark

How many more boys chose lions than elephants?



5b

1 mark

Which animal was chosen by the greatest number of children?



5c

1 mark

6

The time is 10:35 am.



Kate says,

***'The time is closer to 11:00 am than to 10:00 am'.***

Explain why Kate is correct.

A large, empty, cloud-shaped area with a scalloped border, intended for the student to write their explanation.

6

1 mark

7

Here are some amounts of money.

Circle **all** the amounts that can be made with **three** coins.

71p

72p

73p

74p

75p

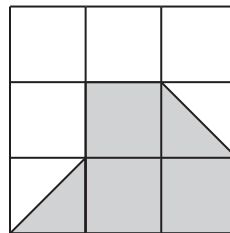
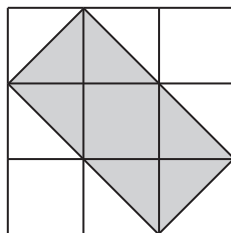
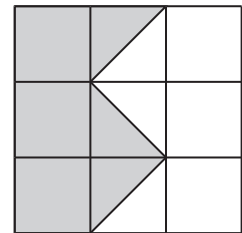
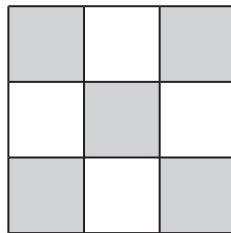
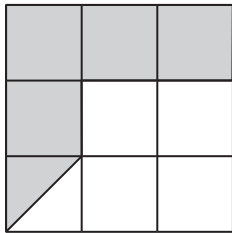
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7  
1 mark

8

Here are five diagrams.

Look at each one.

Put a tick (✓) on the diagram if exactly  $\frac{1}{2}$  of it is shaded.  
Put a cross (✗) if it is not.

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8i  

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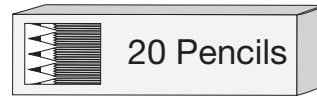
8ii  
2 marks



9

50 children need **two** pencils each.

There are 20 pencils in a box.



How many boxes of pencils are needed?



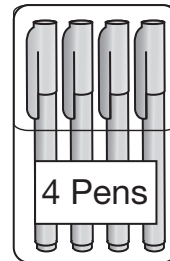
boxes

9a

1 mark

50 children need **one** pen each.

Pens are sold in packs of 4



How many packs of pens need to be bought?

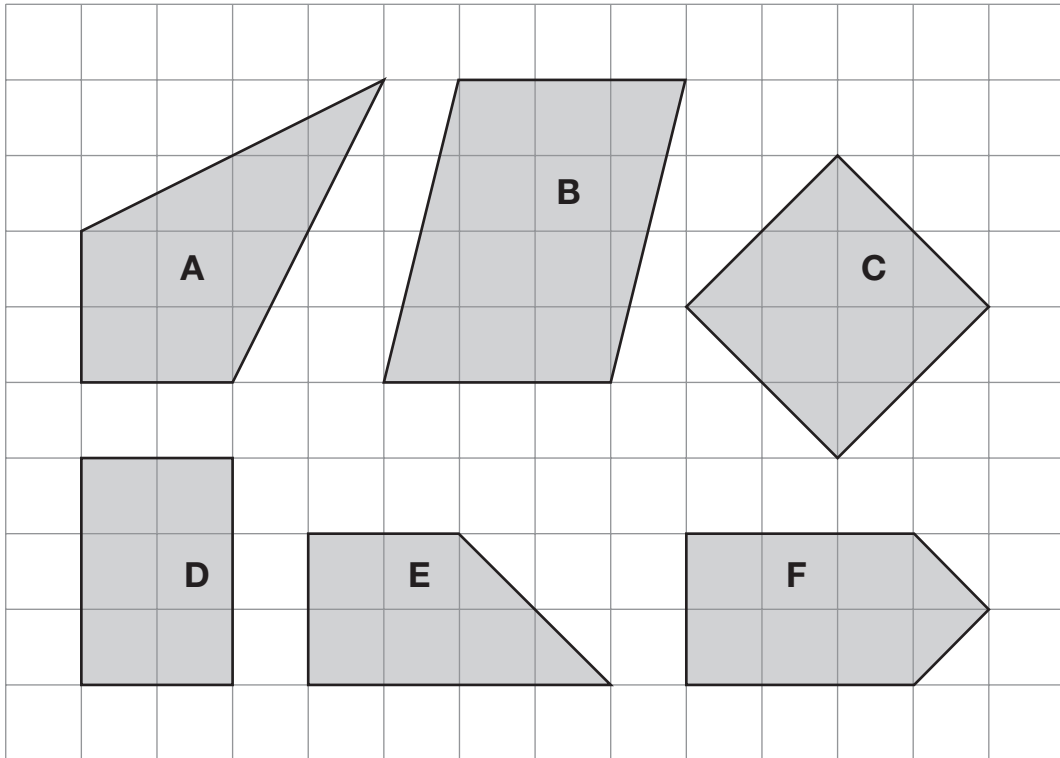


packs

9b

1 mark

Look at these shapes.



Complete the sentences below.

One has been done for you.

    A     is a kite



           is not a quadrilateral

           has only 2 right angles

           has 2 acute angles

10i

10ii

2 marks

11

Write these numbers in order of size, starting with the smallest.

3.01

13.0

0.31

1.30

3.1



smallest

11

1 mark

12

The signs are missing from these number sentences.

Write in the missing signs, + - × or ÷

The first has been done for you.



$$6 \times 5 = 40 - 10$$

$$20 \bigcirc 8 = 4 \bigcirc 7$$

$$21 \bigcirc 3 = 15 \bigcirc 8$$

12a

1 mark

12b

1 mark

13

Jamie, Kate and Hassan run a 50m race.

Kate's time is 13 seconds.

Jamie finishes 5 seconds before Kate.

Hassan finishes 3 seconds after Jamie.



What is **Hassan's time** in seconds?



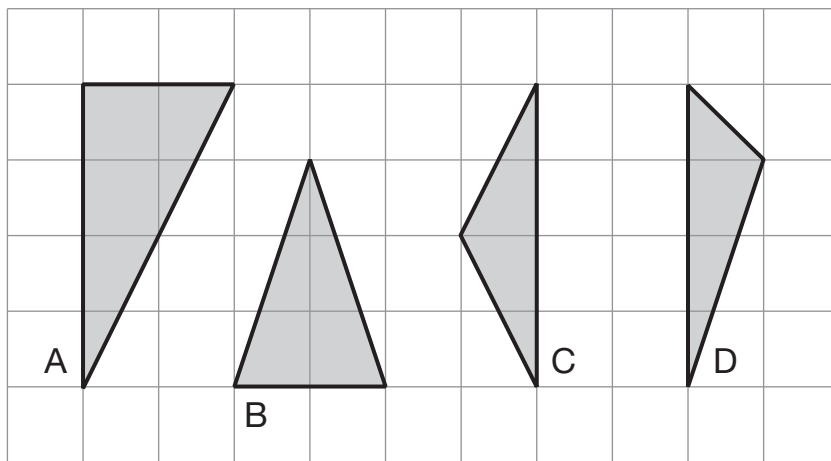
seconds

13

1 mark

14

Here are four triangles on a square grid.



Write the letters of the **two isosceles** triangles.



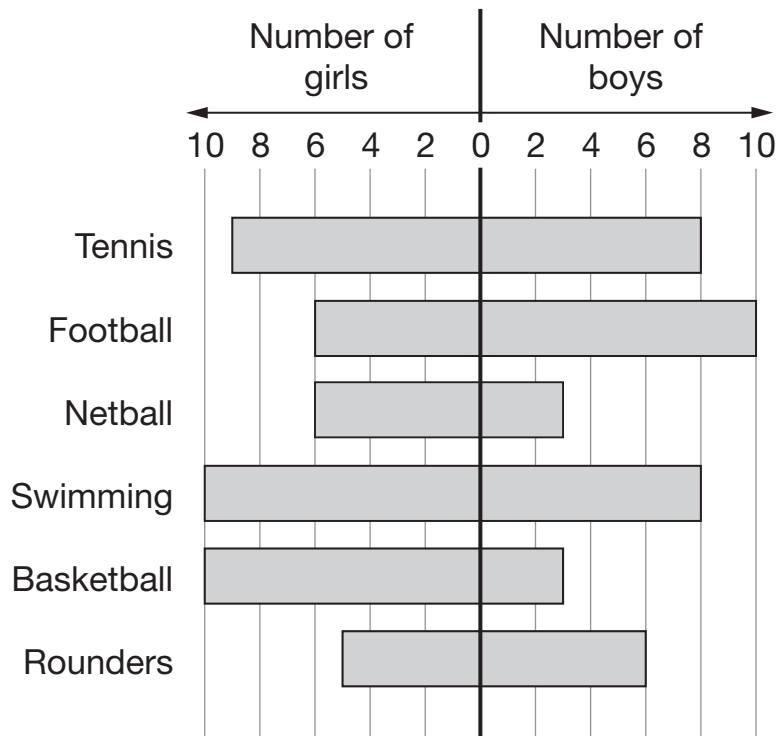
\_\_\_\_\_ and \_\_\_\_\_

14

1 mark

Some children each chose their favourite sport.

This chart shows the results.



Which sport was chosen by the most children?



\_\_\_\_\_

15a

1 mark

How many **more** girls than boys chose basketball?




15b

1 mark

Write **all** the sports that were chosen by more boys than girls.



\_\_\_\_\_

15c

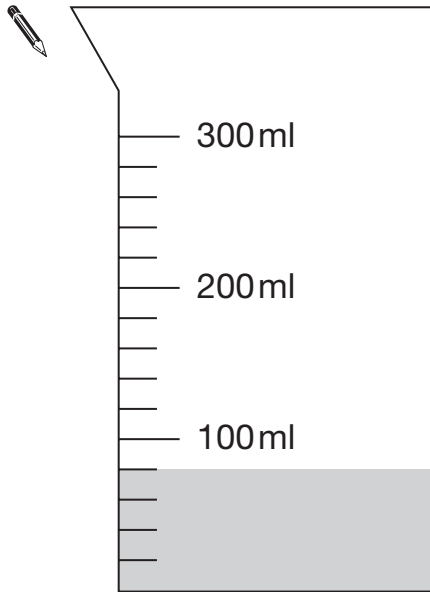
1 mark

16

Hassan has a jug with some water in it.

He adds another 140 millilitres of water.

Draw a line to show the new level of water.



16

1 mark



Kate and Jamie each have some money.

Altogether they have **£1.50**

Kate gives Jamie **10p** so that they both have the same amount.

How much money did each have at the start?

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

Kate had  p      Jamie had  p

17i

17ii

2 marks

18

Hassan scores 40 out of 80 in a test.

Kate scores 40% in the same test.

Who has the higher score?  
Circle **Hassan** or **Kate**.



Hassan / Kate

Explain how you know.



18

1 mark



19

Calculate  $1.2 \times (1.3 + 1.4) \times 1.5$



19

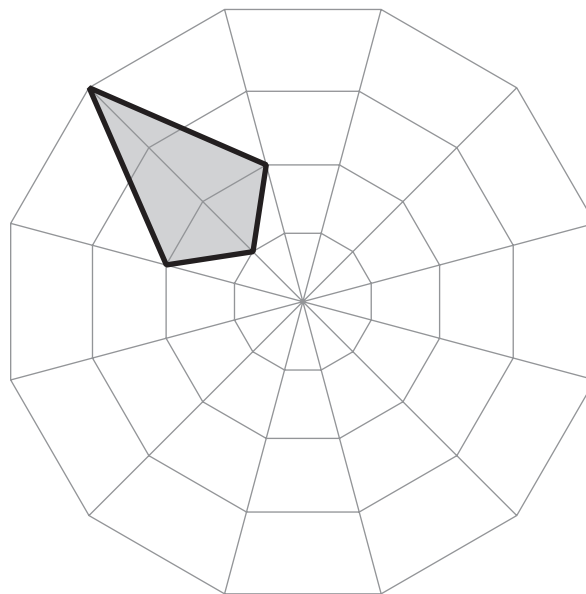
1 mark

20

Here is a shaded shape on a grid.

Jamie rotates the shape  $90^\circ$  **clockwise** about the centre of the grid.

Draw the shaded shape in its new position.



20i

20ii

2 marks



The cost for using a minibus is £1.36 for each kilometre.

8 friends go on a 114 kilometre journey.

They share the cost equally.

How much does each person pay?

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

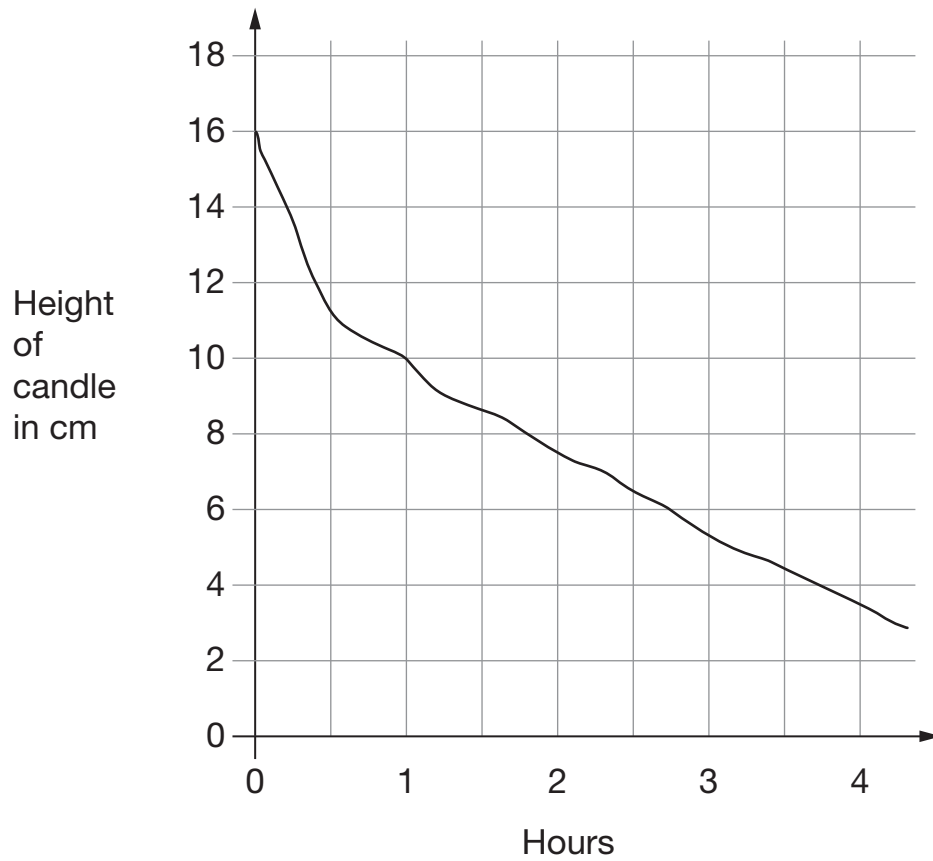
£

21i

21ii

2 marks

This graph shows the height of a candle as it burns.



Look at the graph.

What is the height of the candle after 2 hours?


 cm

22a

1 mark

How long does the candle take to burn down from 16cm to 4cm?



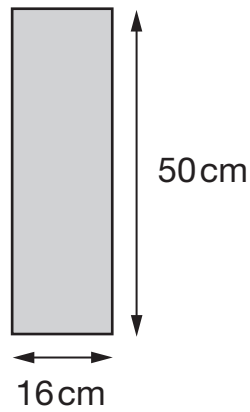

22b

1 mark

23

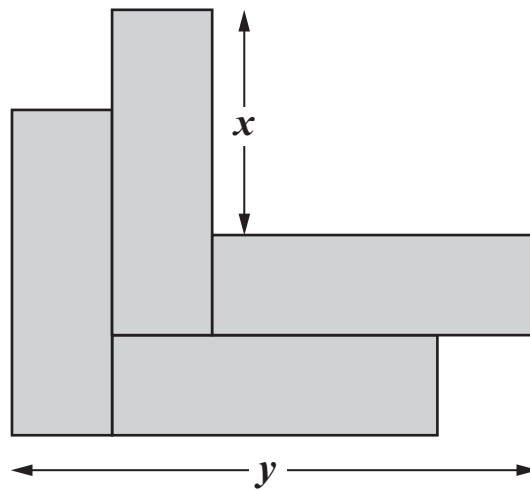
Kate has some rectangles.

They each measure 16 centimetres by 50 centimetres.



Not actual size

She makes this design with four of the rectangles.



Work out the lengths  $x$  and  $y$ .

  $x =$

23a

1 mark

$y =$

23b

1 mark

24

Two whole numbers are each **between 50 and 70**

They multiply to make 4095

Write in the missing numbers.

  ×  = 4095

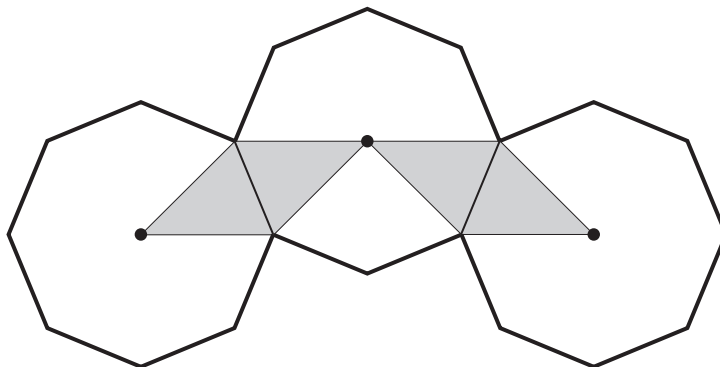
24

1 mark

25

The diagram shows three regular octagons joined together.

There is a dot at the centre of each octagon.



What fraction of the diagram is shaded?



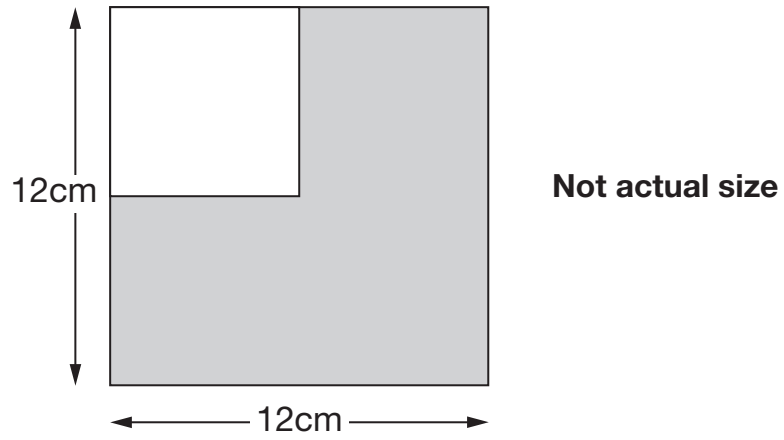
25

1 mark

26

A white square is painted in one corner of a grey square.

Each side of the white square is **half** the length of a side of the grey square.



What is the **area** of the grey section?

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

cm<sup>2</sup>

26i

26ii

2 marks

End of test

