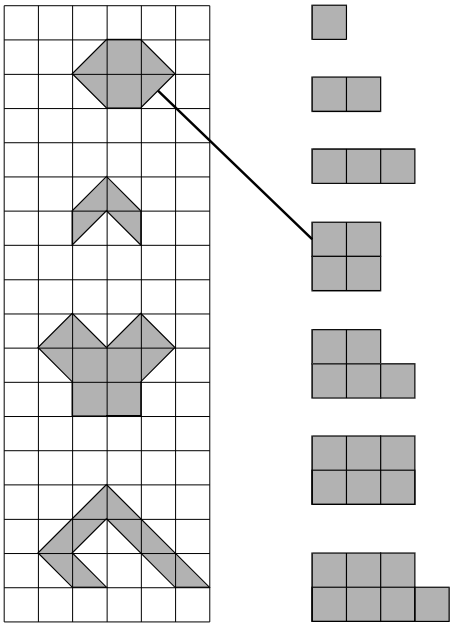
Area & Perimeter KS2 SATS Standard Worksheet

1. Match each shape on the left to one with **equal area** on the right.

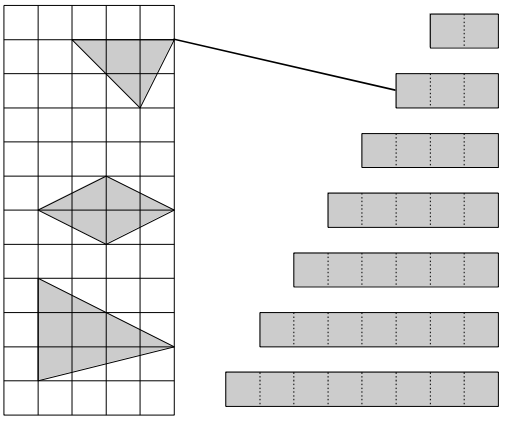
One has been done for you.



2 marks

2. Draw **one line** from each shape to the rectangle which has the **same area**.

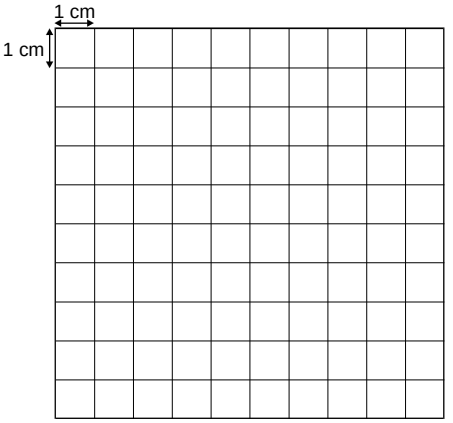
One is done for you.



2 marks

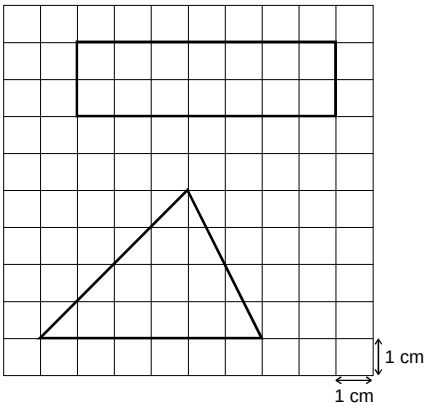
3. Draw a rectangle whose perimeter is 18 centimetres (cm).

You must use the lines of the grid.



1 mark

4.



Work out the area of each shape.

(a) Rectangle

cm²

1 mark

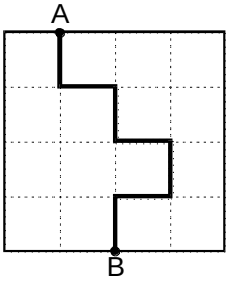
(b) Triangle

cm²

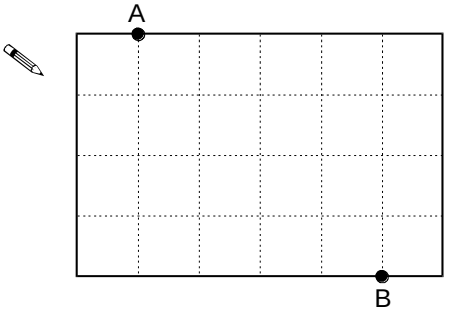
1 mark

5. A line starts at **A** and goes along the dotted lines to **B**.

It divides the area of the grid into **halves.**

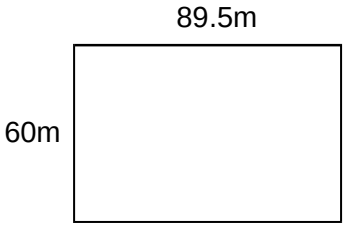


Divide the area of the grid below into **halves**. Start at **A** and go along the dotted lines to **B**.



1 mark

6. A field measures 89.5m by 60m.

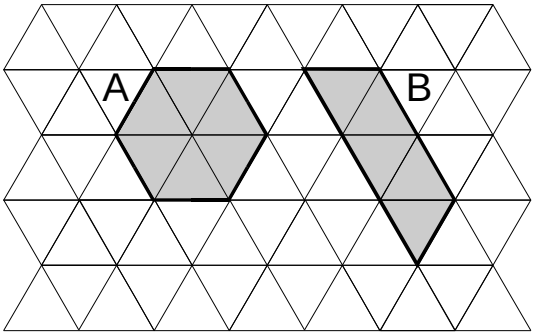


What is the perimeter of the field?

m

1 mark

7. Leon's grid has two shaded shapes.



Leon says,

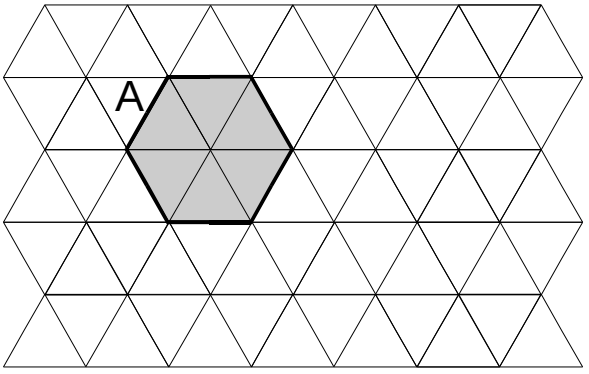
"Shape A has a larger area than shape B."

Explain how he could have worked this out.

.....

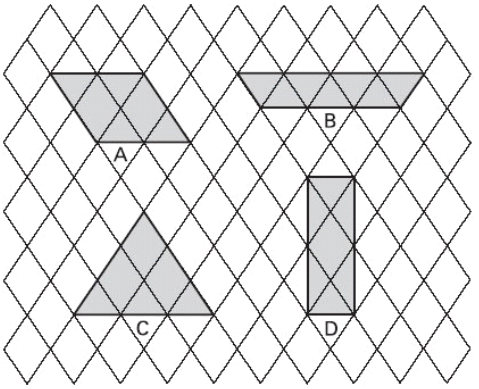
1 mark

On this grid draw a **different** shape. It **must** have the **same area** as shape **A**.



1 mark

8. Here are some shapes drawn on a grid.



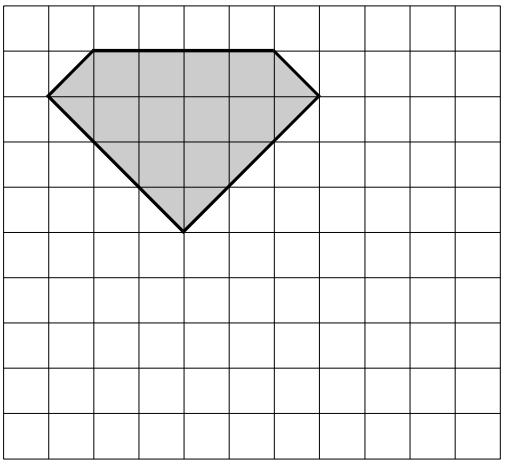
Write the letters of the **two** shapes that are equal in area.

..... and .....

1 mark

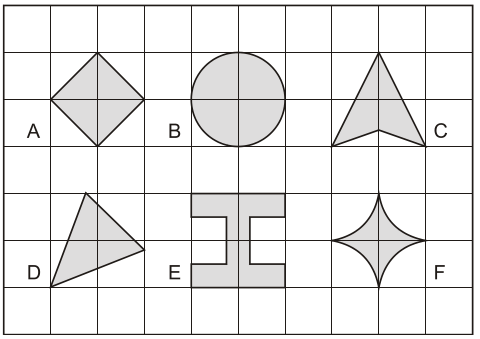
9. On the grid, draw a **rectangle** which has the **same area** as this shaded pentagon.

Use a ruler.



1 mark

10. Here are some shapes on a grid.



Which shape has the **longest perimeter**?

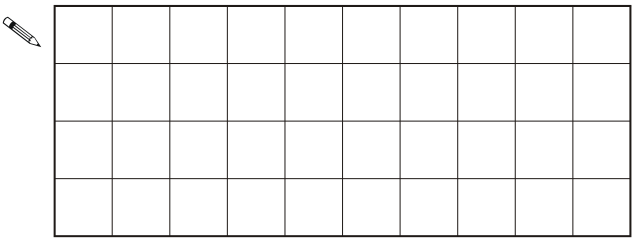
1 mark

Which shape has the **largest area**?

1 mark

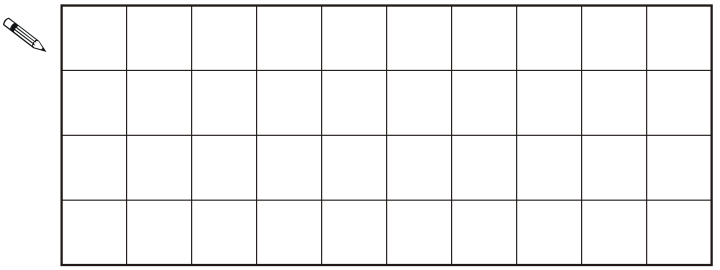
11. Here is a centimetre square grid.

On the grid draw a **shape** which has an **area** of **10** square centimetres.



1 mark

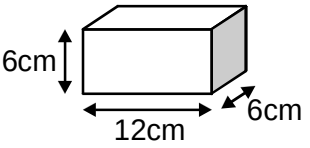
On the grid below draw a **rectangle** which has a **perimeter** of **10** centimetres.



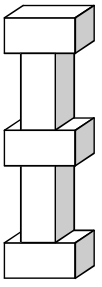
1 mark

12. Martin has some bricks.

They are 12cm long, 6cm high and 6cm deep.



He builds this tower with **five** bricks.



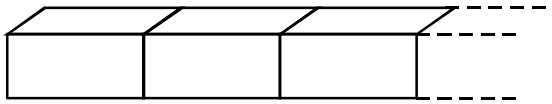
How tall is the tower?

cm

1 mark

Each brick is 12cm long.

Martin makes a line of bricks **132cm long**.

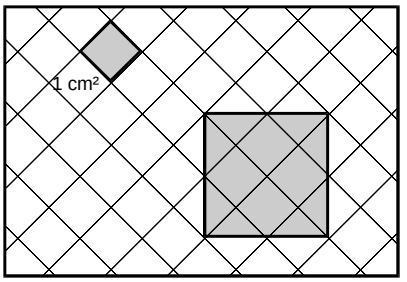


How many bricks does he use?

1 mark

13. The **area** of the **small** shaded square is **1 square centimetre.**

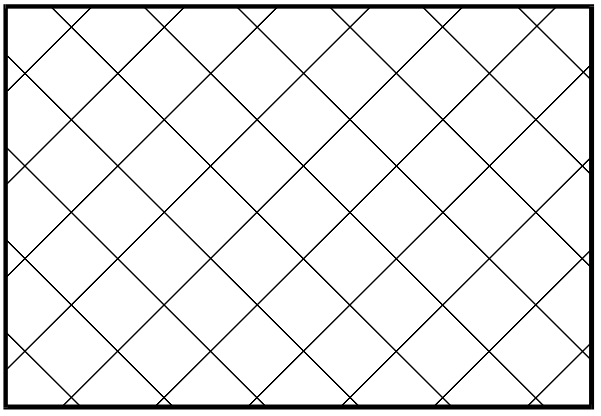
What is the **area** of the **larger** shaded square?



cm²

1 mark

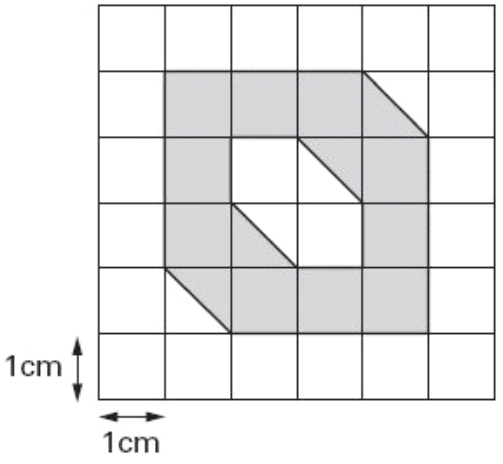
On the grid below, draw a **square** with an **area** of **2 cm²**.



1 mark

14. Here is a 1cm square grid.

Some of the grid is shaded.



What is the **area** that is shaded?

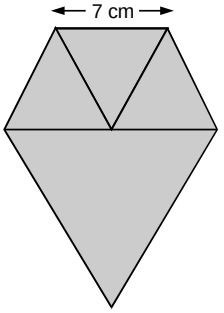
cm²

1 mark

15. Lauren has **three small equilateral triangles** and **one large equilateral triangle**.

The small triangles have sides of **7 centimetres**.

Lauren makes this shape.



Not actual size

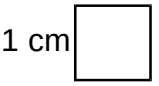
Calculate the **perimeter** of the shape.

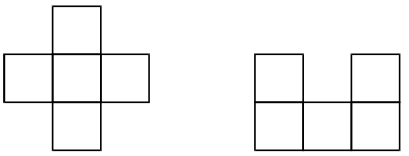
Do **not** use a ruler.

cm

1 mark

16. Here are two shapes made with centimetre squares.





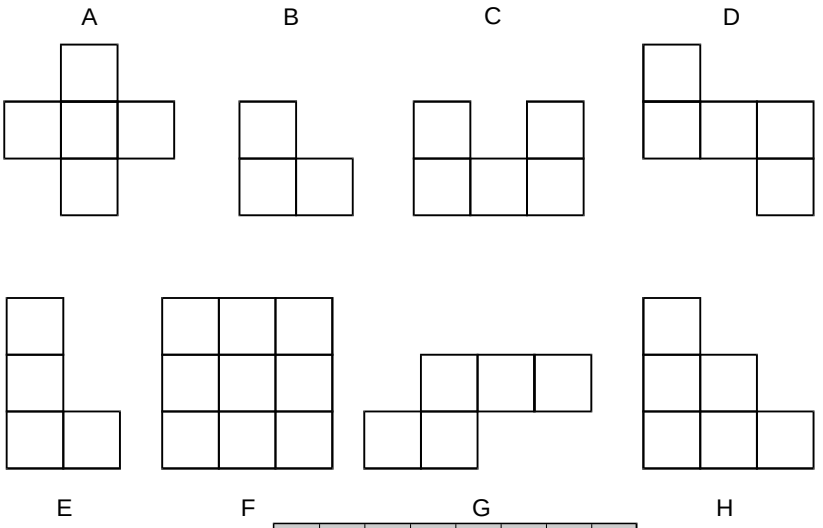
Each shape has 5 squares.

Write **ONE** other thing which is the **same** about the two shapes.

.....

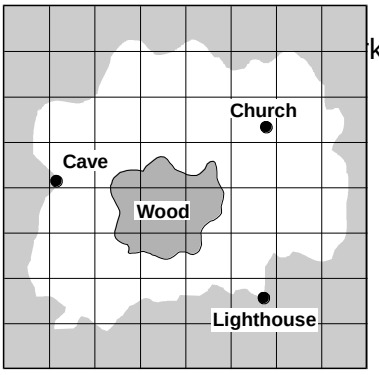
1 mark

Here are more shapes made with centimetre squares.



Which shape has a **perimeter** of k

17. Here is a map of an island.



Estimate the area of the **Wood**.

squares

1 mark

A boat can safely carry 145 kilograms.

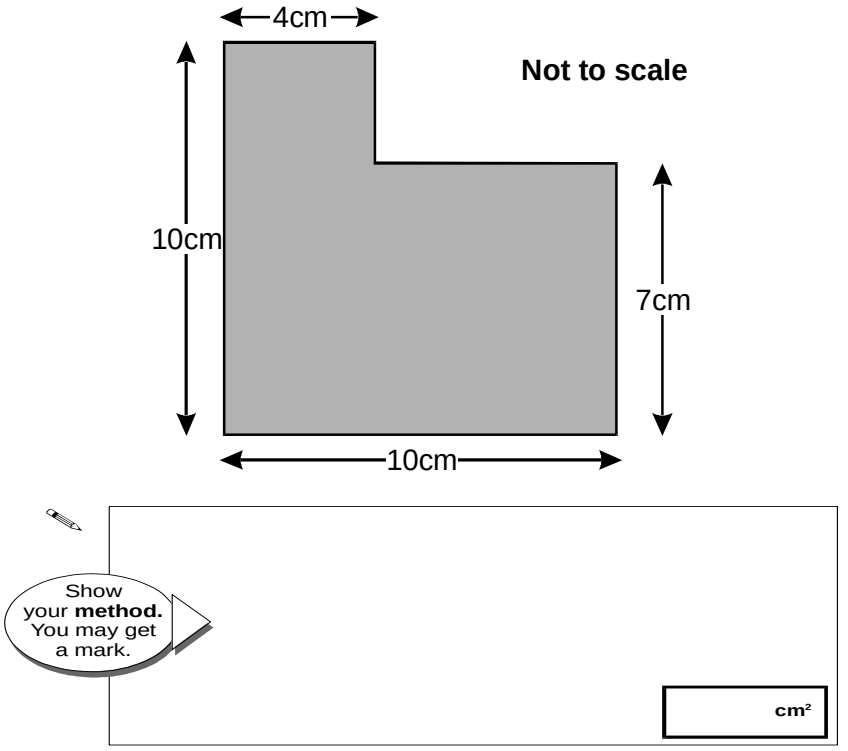
Name	Mary	Ann	John	Bob	Huw	Kate
Weight in kg	59.5	41.1	39.8	80.3	28.2	32.1

Work out if the boat can **safely** carry Mary **and** Bob.

You **must** show your working.

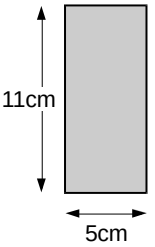
1 mark

18. What is the **area** of this shape?

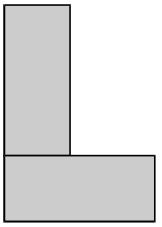


2 marks

19. Liam has two rectangular tiles like this.



He makes this L shape.

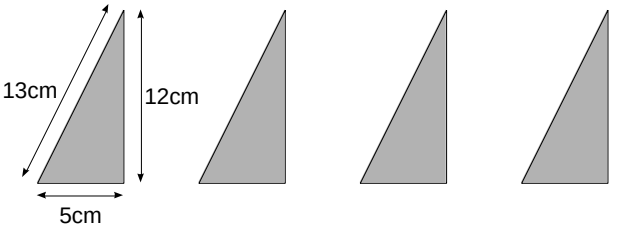


What is the **perimeter** of Liam's L shape?

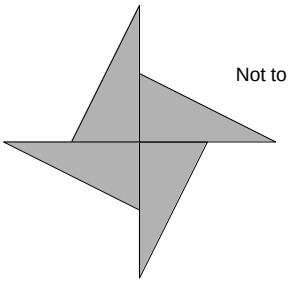
cm

1 mark

20. Lindy has 4 triangles, all the same size.



She uses them to make a star.

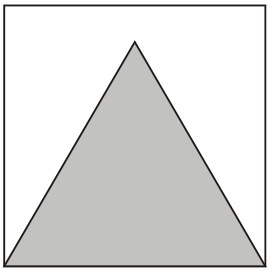


Not to scale

Calculate the **perimeter** of the star.

2 marks

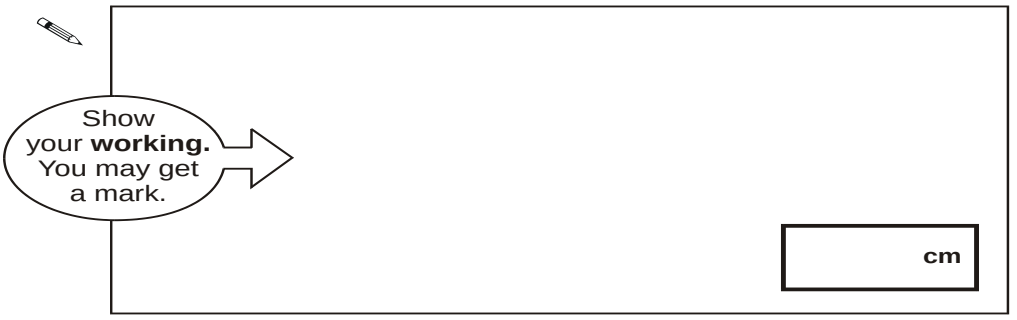
21. Here is an equilateral triangle inside a square.



Not actual size

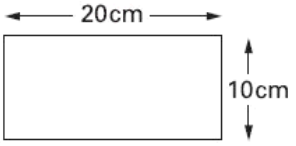
The perimeter of the triangle is 48 centimetres.

What is the perimeter of the **square**?



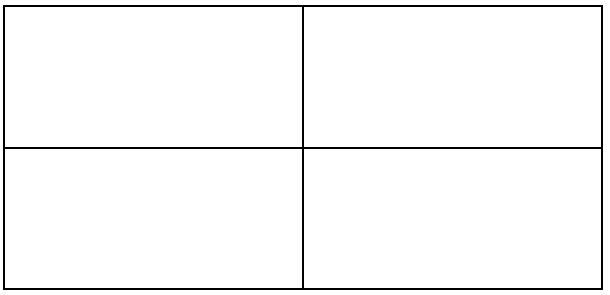
2 marks

22. Rebecca has rectangular tiles like this.



Not to scale

She makes a larger rectangle using 4 of the tiles.



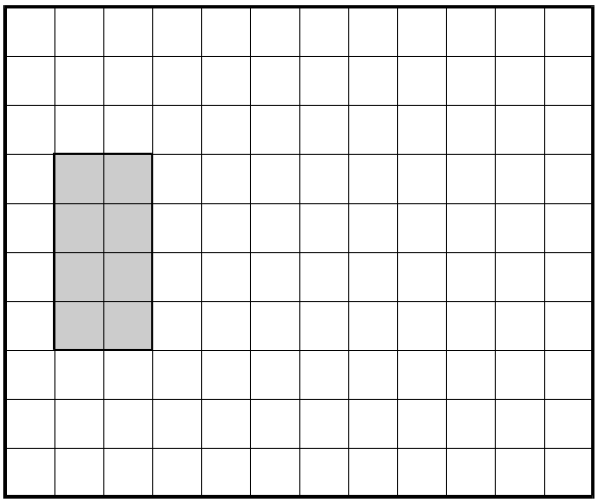
What is the **area** of the larger rectangle?

cm²

1 mark

23. On the grid draw a **triangle** with the **same area** as the shaded rectangle.

Use a ruler.

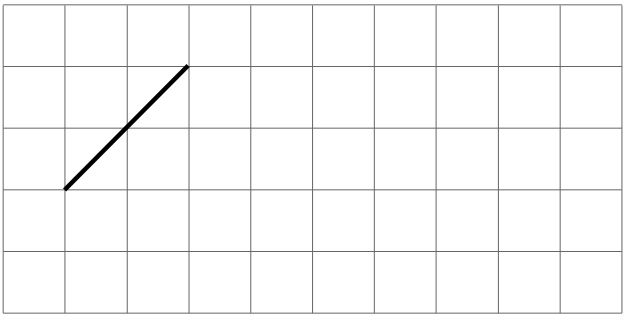


1 mark

24. This is a centimetre grid.

Draw **3 more lines** to make a **parallelogram** with an **area** of **10cm²**

Use a ruler.

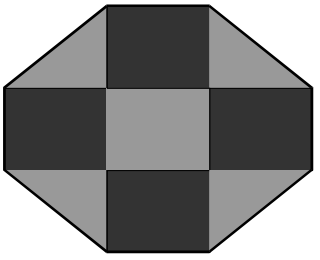


1 mark

25. This plan of a garden is made of rectangles and triangles.

The area of each **rectangle** is **12 square metres.**

What is the **area** of the **whole garden**?

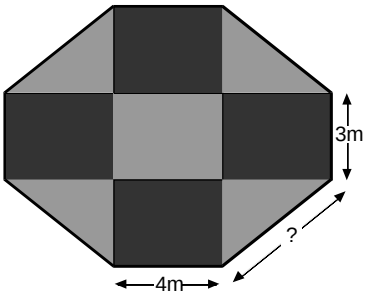


m²

1 mark

The **perimeter** of the garden is **34 metres**.

What is the length of the **longest side** of each triangle?

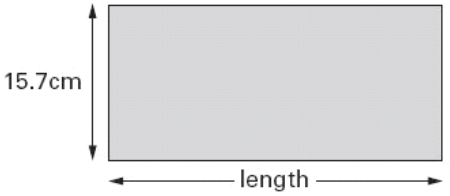


Show your **working**. You may get a mark

m

2 marks

26. Here is a rectangle with a width of 15.7 centimetres.



Not actual size

The **perimeter** of this rectangle is 85 centimetres.

Calculate the length of the rectangle.

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

cm

2 marks