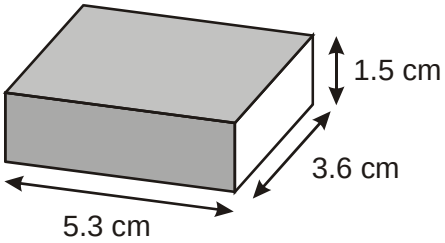
1. Matchboxes

The diagram shows a matchbox.

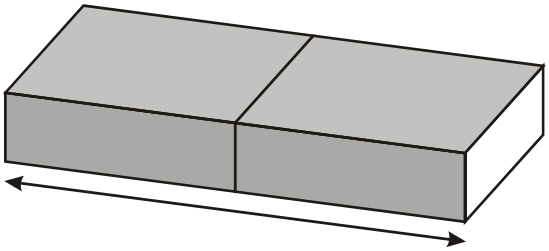
Its length is 5.3 cm. Its width is 3.6 cm. Its height is 1.5 cm.



Not drawn accurately

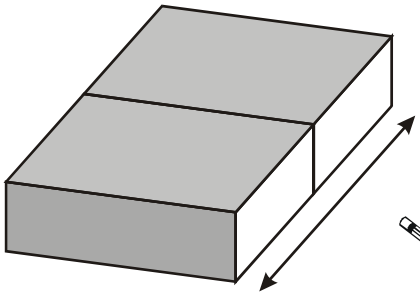
(a) I join **two** matchboxes in different ways.

Fill in the missing values.



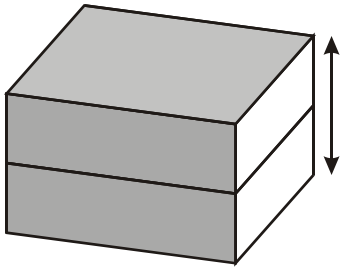
length = cm

1 mark



width = cm

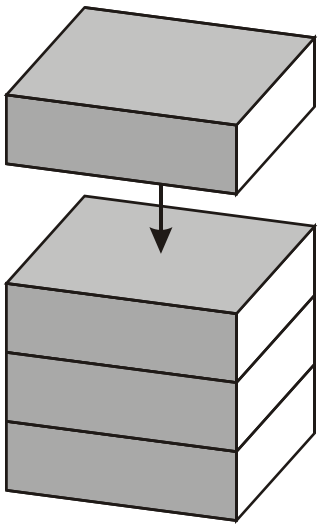
1 mark



height = cm

1 mark

(b) I start joining matchboxes like this:

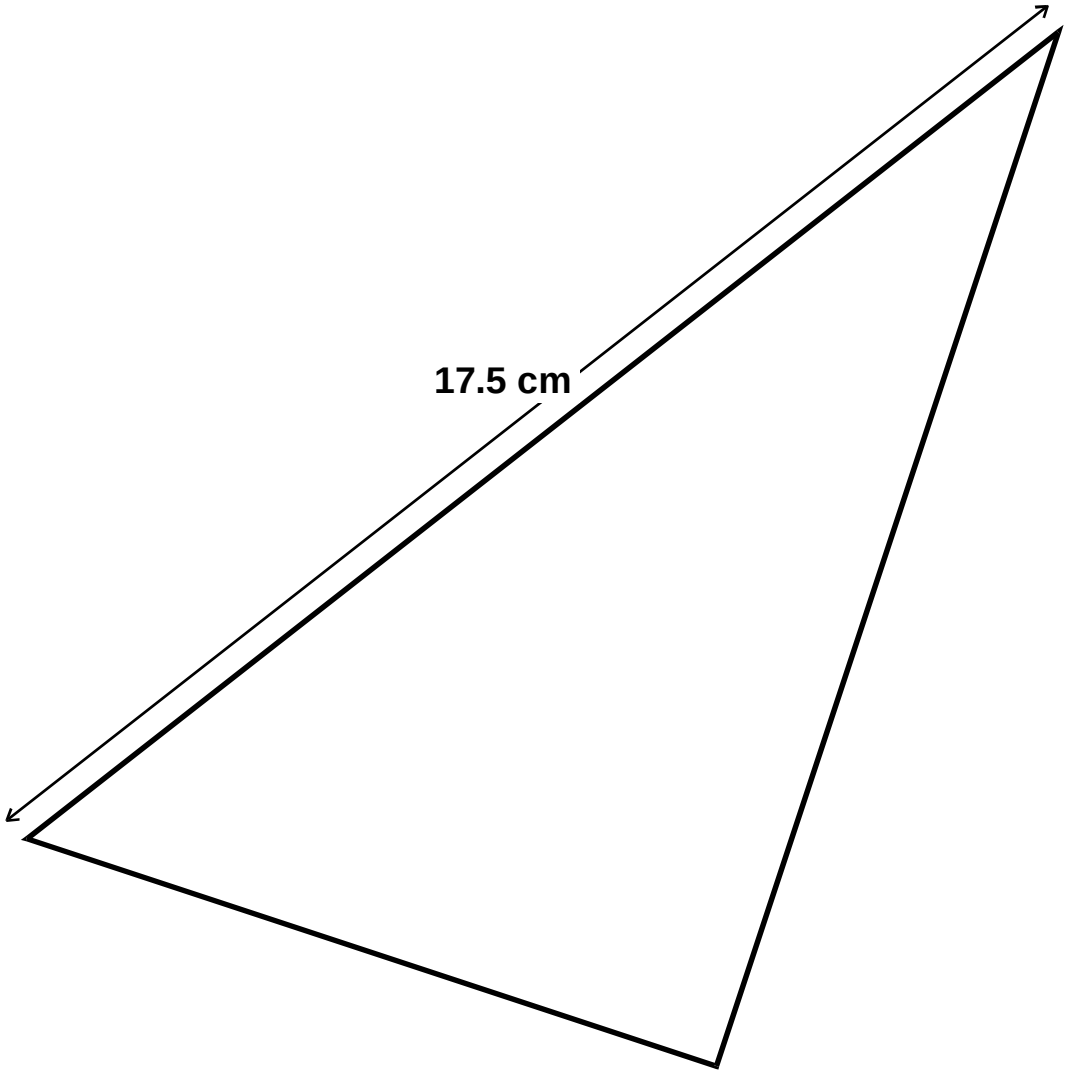


How many matchboxes will be in the pile when its height is **12 cm**?

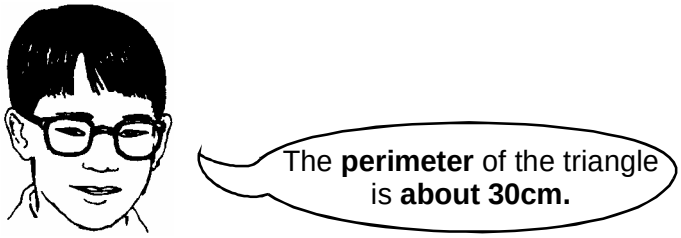
..... 1 mark

2. Lengths

(a) This triangle is accurately drawn
One side is 17.5cm long.



Glyn says:



How can you tell that he is wrong **without** measuring the other two sides?

1 mark

(b) Measure each of the other two sides of the triangle.

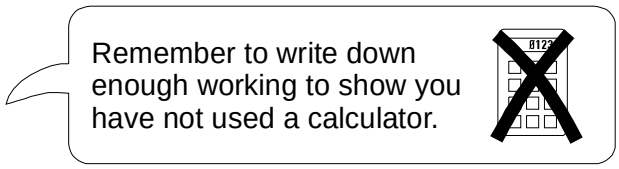
Write their lengths to the **nearest 0.1** of a centimetre.

..... cm and ..... cm and **17.5cm**

2 marks

(c) Add up the lengths of the three sides of the triangle to find the **perimeter** of the triangle.

Working

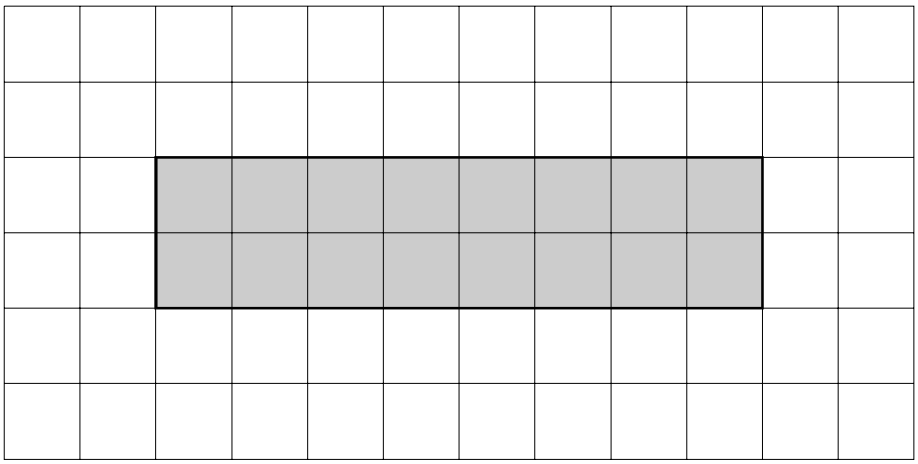


..... cm

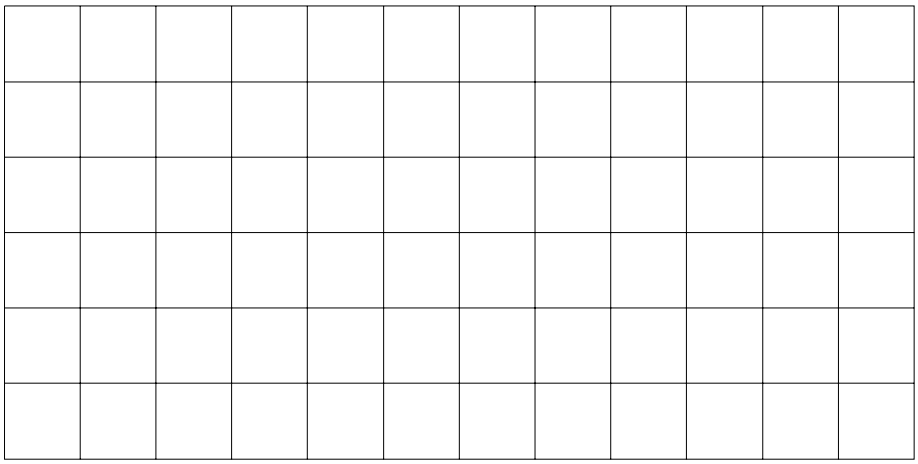
2 marks

3. Thinking shapes

The diagram shows a rectangle, drawn on a square grid.

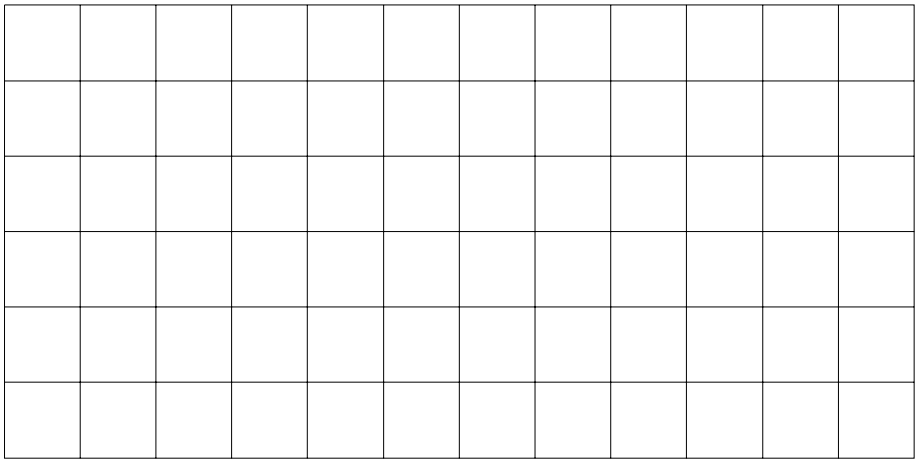


(a) Draw a **square** that has the **same area** as the rectangle.



1 mark

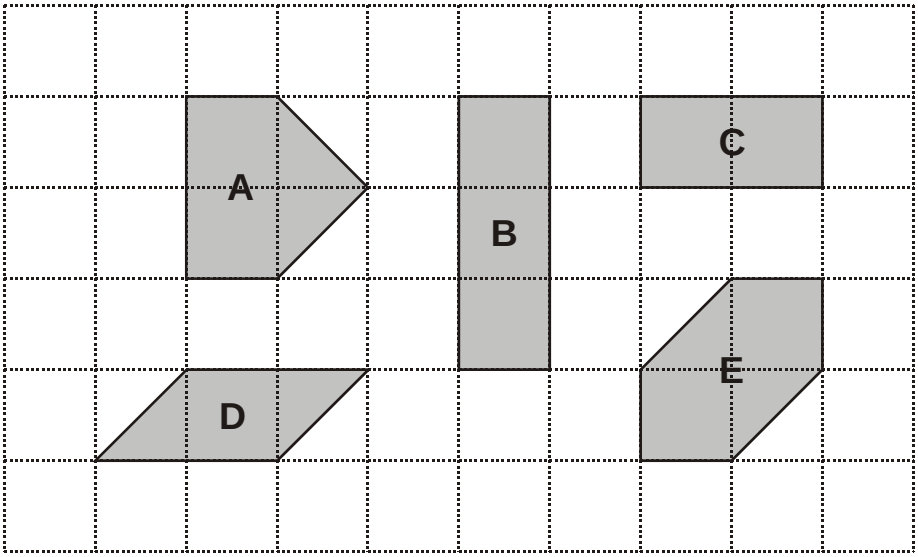
(b) Draw a **square** that has the **same perimeter** as the rectangle.



1 mark

4. Grid shapes

The diagram shows some shapes on a 10 by 6 square grid.



(a) Which **two** shapes have the **same area** as shape **A**?

..... 1 mark

(b) Which **two** shapes have the **same perimeter** as shape **A**?

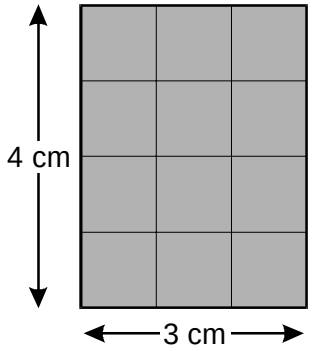
..... 1 mark

(c) How many of shape **C** would you need to cover a 10 by 6 square grid?

..... 1 mark

5. Areas

(a) What is the **area** of this rectangle?



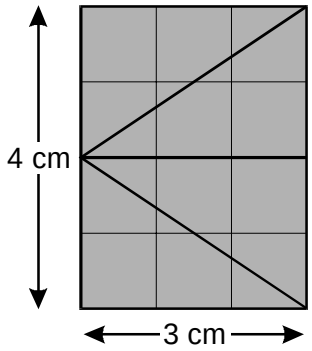
..... cm^2

1 mark

(b) I use the rectangle to make four triangles.

Each triangle is the same size.

What is the area of **one** of the triangles?

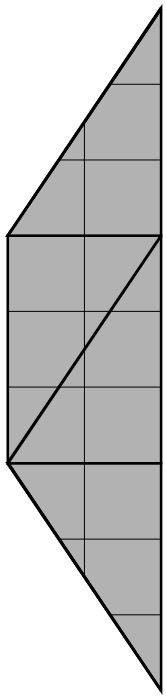


..... cm^2

1 mark

(c) I use the four triangles to make a trapezium.

What is the area of the trapezium?



..... cm^2

1 mark