**Class 5 – Homework – Alnwick – 6.2.23**

**Q1.**

Megan says,

***‘If two rectangles have the same perimeter,  
they must have the same area.’***

Is she correct?  
Circle **Yes** or **No**.

Yes / No

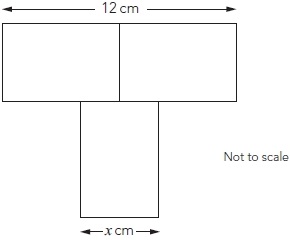
Explain how you know.

1 mark

**Q2.**

Here is a T-shape made from 3 identical rectangles.

The area of the T-shape is **90 cm2**



Work out the value of *x*

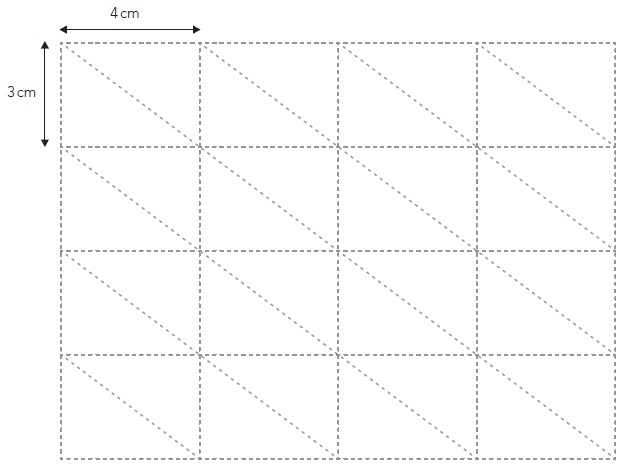
2 marks

**Q3.**

|  |  |
| --- | --- |
| The grid below is made of right-angled triangles like this: |  |

Shade triangles on the grid to make a **quadrilateral**.

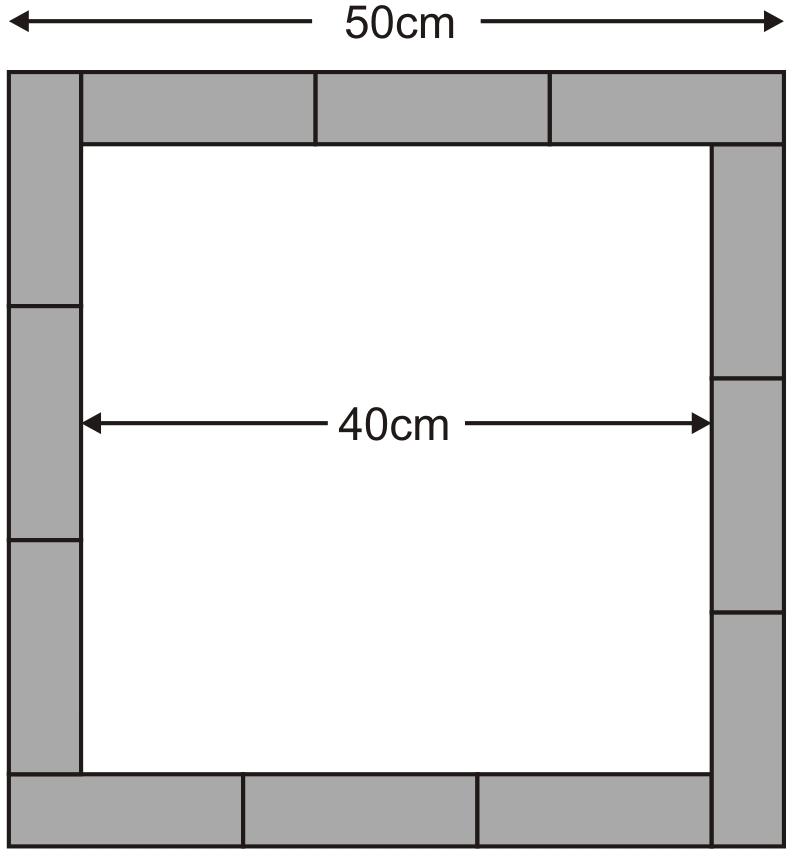
Your quadrilateral must have an area of **24 cm2 and a perimeter of 26 cm.**



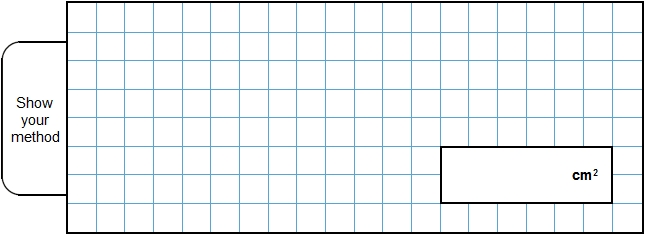
2 marks

**Q4.**

**Twelve rectangles**, all the same size, are arranged to make a **square**, as shown in the diagram.



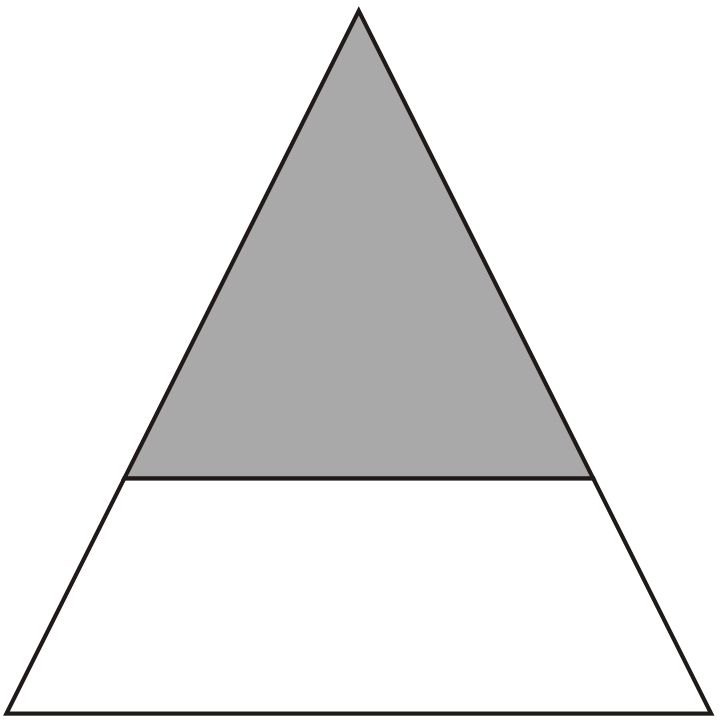
Calculate the **area** of **one** of the rectangles.



2 mark

**Q5.**

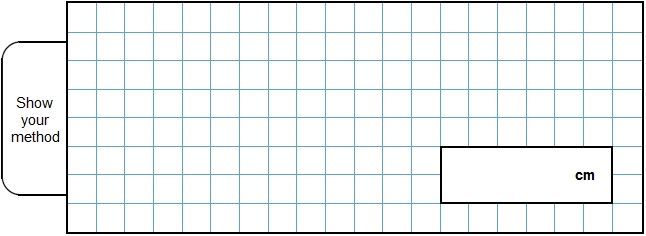
The diagram shows a shaded triangle inside a larger triangle.



The area of the **shaded** triangle is 52 cm2.

The area of the shaded triangle is of the area of the larger triangle.

Calculate the **area** of the **larger** **triangle**.



2 mark