1 The diagram shows a shape.
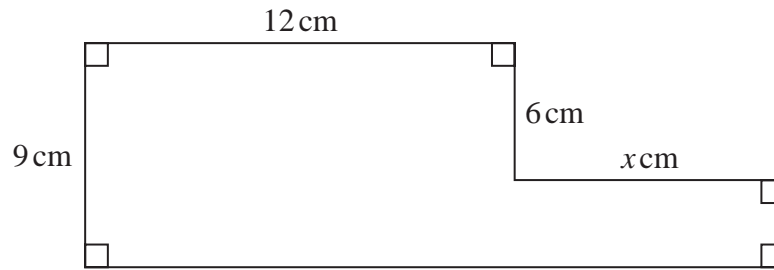

12 cm

9 cm

6 cm

x cm

Diagram **NOT**
accurately drawn

The shape has area 129 cm²

Work out the value of *x*.

x = ...

(Total for Question 1 is 4 marks)

2

Diagram **NOT** accurately drawn
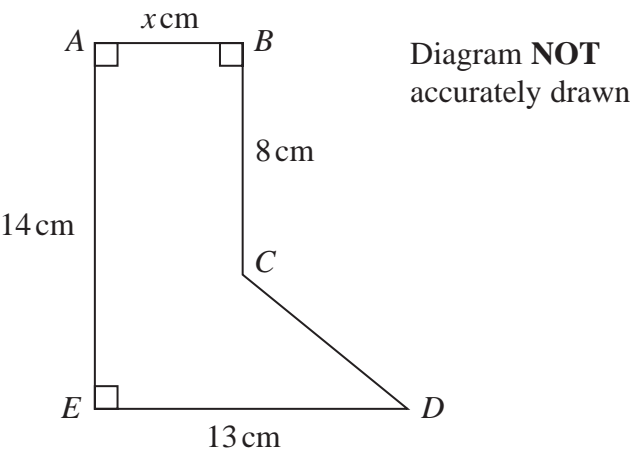
The diagram shows the shape *ABCDE*.

The area of the shape is $91.8 \, cm^2$

Work out the value of *x*.

$x = $ ....

(Total for Question 2 is 4 marks)

3 The diagram shows a quadrilateral *ABCD*

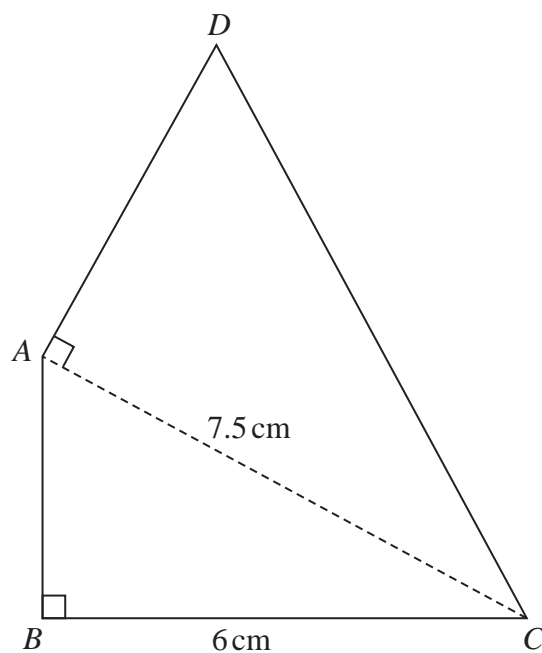Diagram **NOT**
accurately drawn

In the diagram, *ABC* and *DAC* are right-angled triangles.

$BC = 6\,\text{cm}$ $AC = 7.5\,\text{cm}$

The area of quadrilateral *ABCD* is $31.5\,\text{cm}^2$

Work out the length of *AD*

.... cm

(Total for Question 3 is 6 marks)

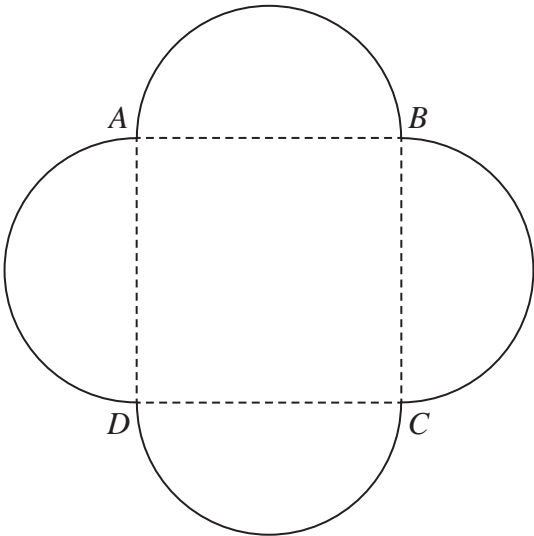**4** The diagram shows a shape made from a square *ABCD* and 4 identical semicircles.
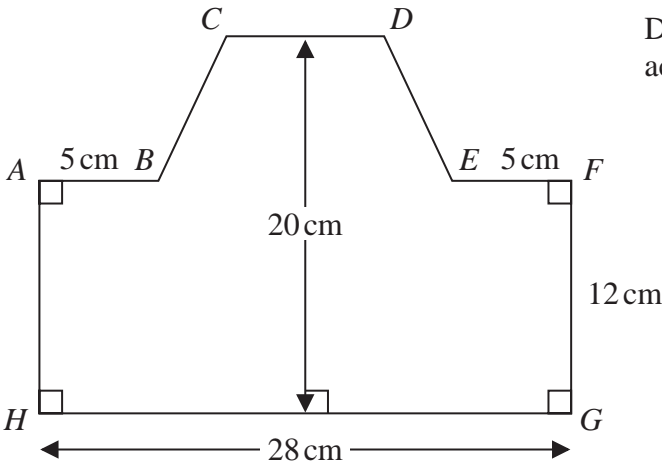

Diagram **NOT** accurately drawn

As shown in the diagram, the semicircles have *AB*, *BC*, *CD* and *DA* as diameters.

The area of the square is $36\,\text{cm}^2$

Calculate the total area of the shape.
Give your answer correct to one decimal place.

.... cm^2

(Total for Question 4 is 4 marks)

5   The diagram shows an 8-sided shape *ABCDEFGH*.

Diagram **NOT** accurately drawn

$HG = 28$ cm $FG = 12$ cm $AB = EF = 5$ cm
The height of the shape is 20 cm
CD is parallel to *HG*

The area of shape *ABCDEFGH* is 434 cm^2

Find the length of *CD*.

.... cm

(Total for Question 5 is 4 marks)