1 The diagram shows a shape.

12 cm

Diagram **NOT**
accurately drawn

6 cm

9 cm

x cm

The shape has area 129 cm^2

Work out the value of x.
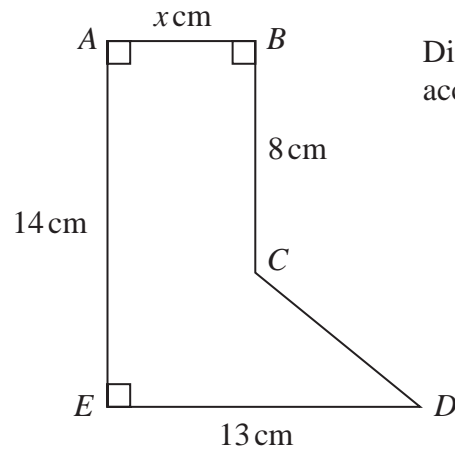
$x =$ ....

(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 cm²

Work out the value of *x*.

$x = $ ....

(Total for Question 2 is 4 marks)

3 The diagram shows a quadrilateral *ABCD*
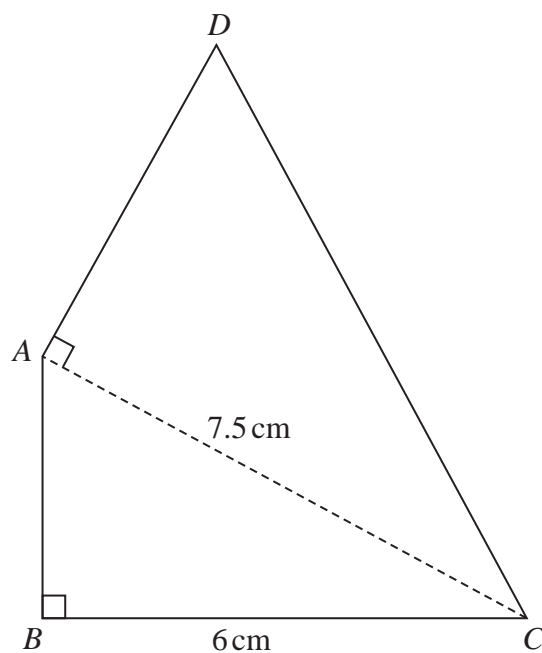

Diagram **NOT**
accurately drawn

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

$BC = 6$ cm $AC = 7.5$ cm

The area of quadrilateral *ABCD* is 31.5 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.
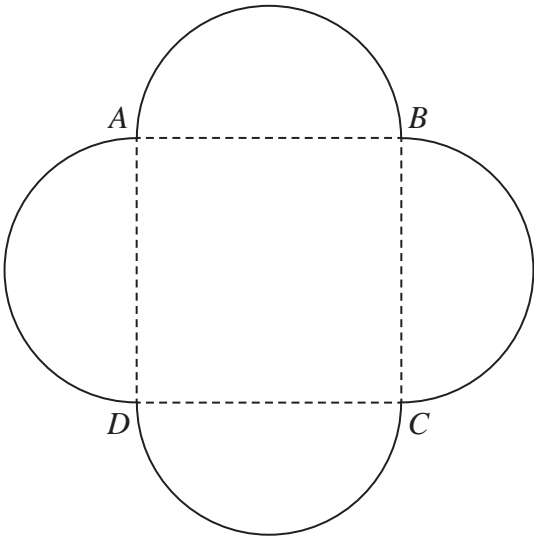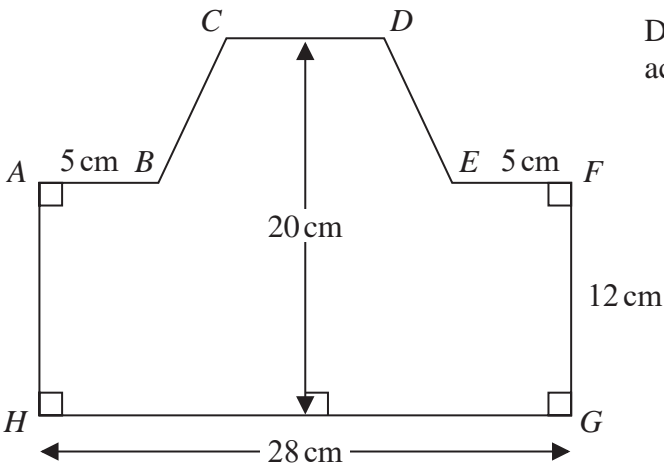
Diagram **NOT** accurately drawn

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

The area of the square is 36cm^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

$HG = 28\,\text{cm}$ $FG = 12\,\text{cm}$ $AB = EF = 5\,\text{cm}$

The height of the shape is $20\,\text{cm}$

CD is parallel to *HG*

The area of shape *ABCDEFGH* is $434\,\text{cm}^2$

Find the length of *CD*.

.... cm

(Total for Question 5 is 4 marks)

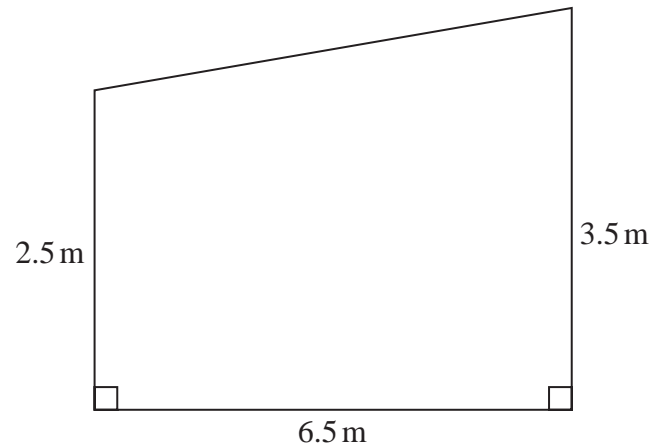**6** The diagram shows a classroom wall in the shape of a trapezium.

Diagram **NOT**
accurately drawn

2.5 m

3.5 m

6.5 m

Dion wants to paint the classroom wall completely twice.
He knows that each tin of paint will cover $12\,m^2$

He is going to have to buy all the paint he needs.

Work out the least number of tins of paint that Dion will need to buy.
Show your working clearly.

....

(Total for Question 6 is 4 marks)

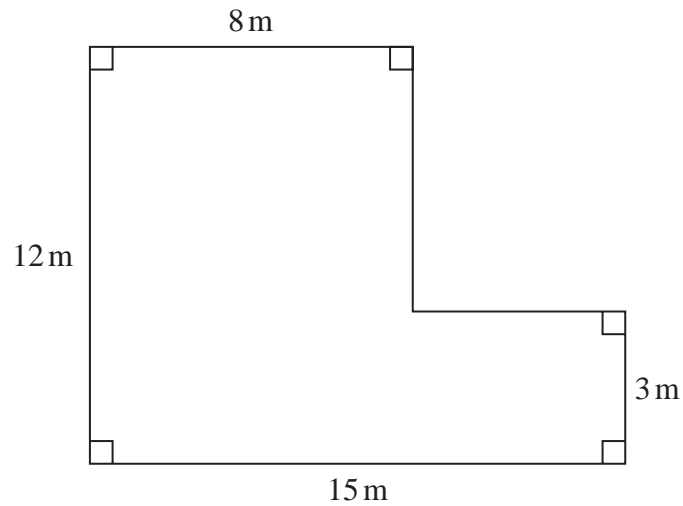**7** The diagram shows the plan of a floor.

8 m

12 m

15 m

3 m

Diagram **NOT** accurately drawn

Indira is going to paint the floor.
She needs to buy enough tins of paint to cover the floor with one coat of paint.

Each tin of paint covers an area of $7\,m^2$
Each tin of paint costs £23.90

Indira buys the least possible number of tins of paint.

Work out the total cost of the tins of paint that Indira buys.
Show your working clearly.

£..

(Total for Question 7 is 5 marks)