Surname	
Other Names	
Candidate's Signature	

GCSE 9 - 1 Questions

Compound Area

Calculator Allowed

INSTRUCTIONS TO CANDIDATES

Write your name in the space provided.

Write your answers in the spaces provided in this question paper.

Answer ALL questions.

Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.

Total Marks :

1)

An L-shaped piece of cardboard has a rectangular piece removed from it as shown in the diagram below.

6 cm

4 cm

2 cm

8 cm

5 cm

diagram not drawn accurately

10 cm
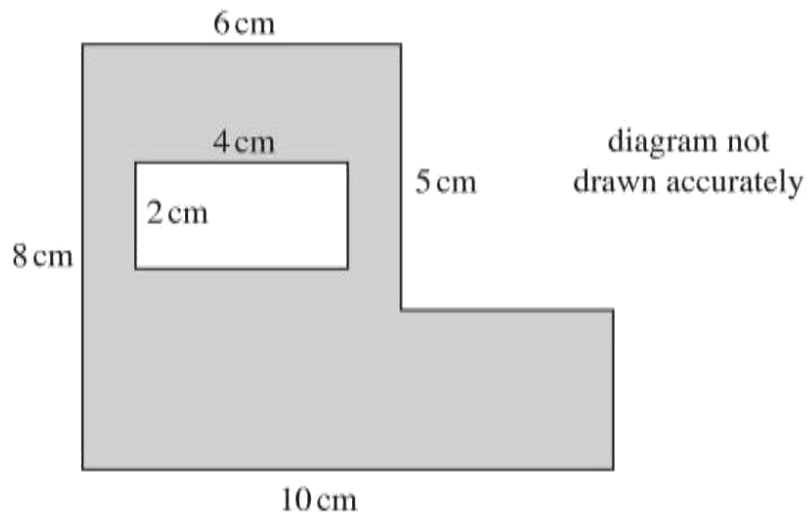
(i) Calculate the area of the remaining piece of cardboard.

Answer _____ cm² [2]

2)

6 cm

1 cm

5 cm

5 cm

1 cm

6 cm

Not drawn
accurately
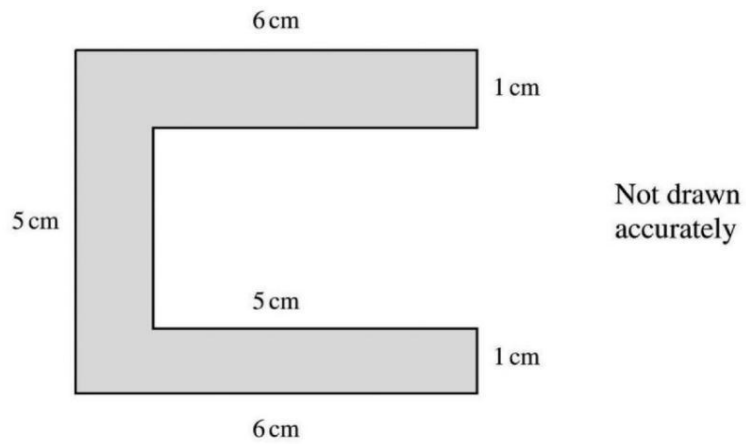
(a) Calculate the perimeter of the shape shown.

Perimeter = _____ [1]

(b) Find the area of the shape.

Area = _____ [2]

3)

The diagram shows a piece of cardboard. The shape is a rectangle with a triangle cut away from the top. Calculate the area of the cardboard.

Answer _____ m^2 [3]

4)
A square has a perimeter of 80 cm.
A circle fits exactly inside the square, as shown in the diagram.

Calculate the circumference of the circle.
Give your answer correct to 1 decimal place.
You must show your working.

[4]

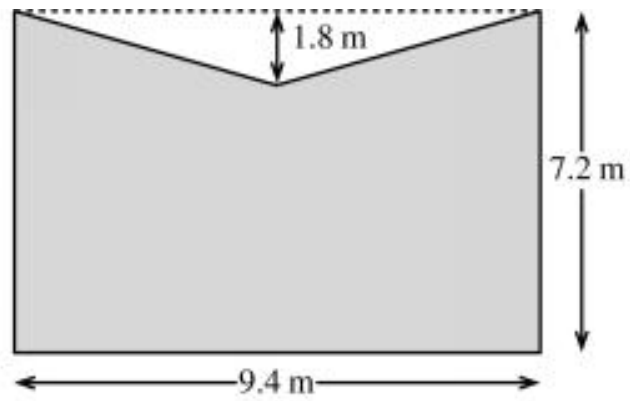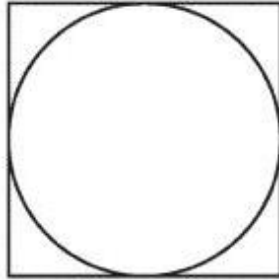..

....

....

....

....

....

....

....

....

....

5)
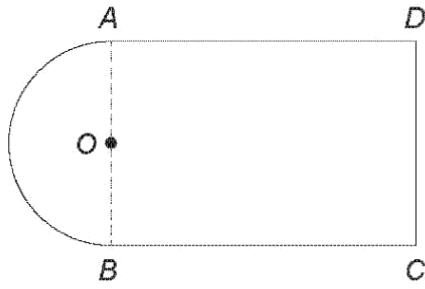The shape below shows a semi circle attached to a rectangle.

Diagram not drawn to scale

The radius of the semi circle is 6·1 cm and the length BC = 16·7 cm.
Calculate the area of the shape. [6]

....

....

....

....

....

....

....

....

....

....

....

....

6)
A company's logo is displayed on the outside of its factory wall.
The shape of the logo is made using a rectangle, a right-angled triangle and a semicircle, as shown in the diagram below.
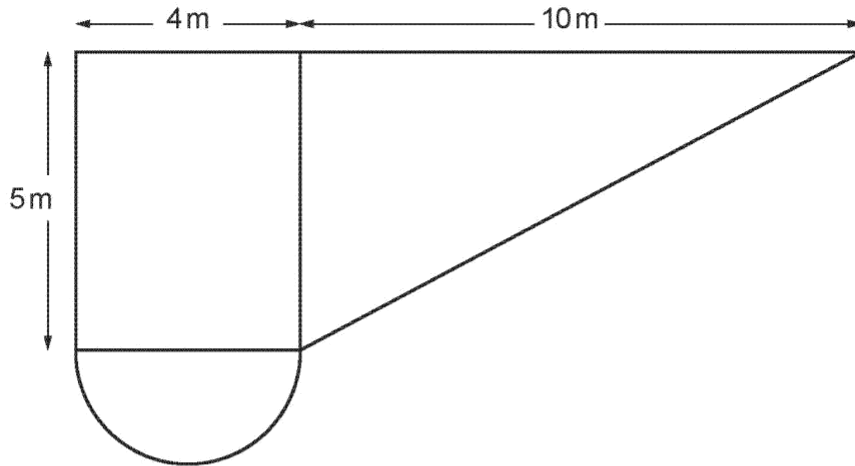Some of the lengths are shown on the diagram.

Diagram not drawn to scale

Calculate the total area of this logo. Give your answer correct to 1 decimal place.   [5]

....

....

....

....

....

....

....

....

....

....

....

....

....

7)

A company sponsoring a sports event intends to spray-paint its logo onto the pitch.

The logo is in the shape of a semicircle on top of a trapezium as shown below.

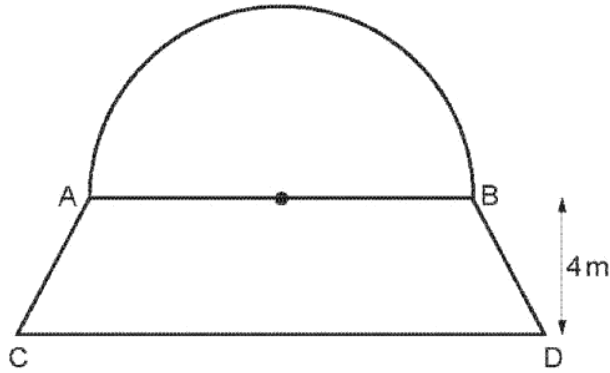AB = 10m, CD = 16m and the height of the trapezium is 4m.

Diagram not drawn to scale

The company has bought enough paint to cover an area of 125m^2.

What percentage of this paint will be required to cover the area of the logo?   [6]