

Surname	
Other Names	
Candidate's Signature	

## GCSE 9 - 1 Questions

### Perimeter

**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) A rectangle has length 6 cm and breadth 2 cm. Calculate its perimeter.

Answer \_\_\_\_\_ cm [1]

- 2) Calculate the perimeter of a rectangle measuring 10.1 cm by 8.3 cm.

Answer \_\_\_\_\_ cm [1]

- 3) What is the perimeter of a square that has an area of  $64\text{ cm}^2$ ? [2]

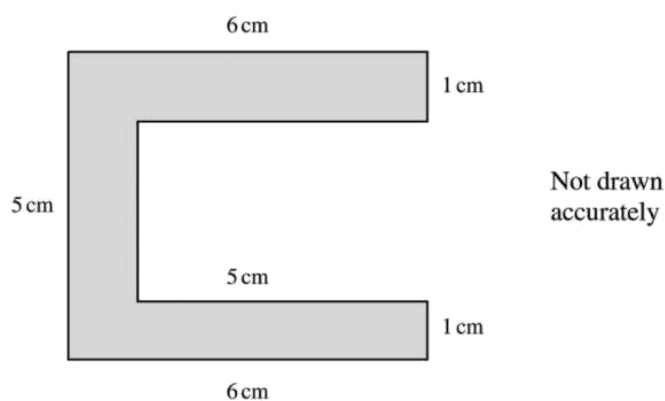
.....

.....

.....

.....

4)

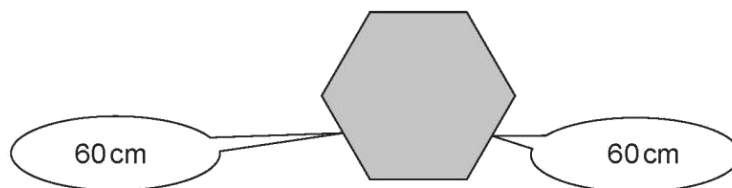


Calculate the perimeter of the shape shown.

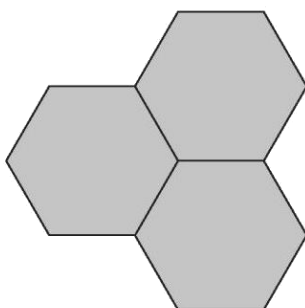
Perimeter = \_\_\_\_\_ [1]



- Rugs can be made in the shape of regular hexagons.  
 7) Some rugs have a border put on the **outer** edges to stop the material from fraying.  
 The length of the border on each **outer** edge of the following rug is 60 cm.



Three of the above regular hexagonal rugs are stitched together to make a larger rug.



Eleven metres of edging have been bought.  
 How much edging will be left over after the border has been put on to the outer edge of the larger rug? [3]

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

The area of a rectangle is  $30\text{ cm}^2$ .

Its length and width are **whole numbers**.

- 8) Find the smallest possible perimeter of this rectangle.

[illegible]

Perimeter = ..... cm

[4]

Find the length and width of a rectangle with an area of  $20 \text{ cm}^2$  and a perimeter of  $24 \text{ cm}$ .

- 9)

.....

.....

.....

.....

Length = .....

Width = .....

[3]

*In this question, you will be assessed on the quality of your organisation, communication and accuracy in writing.*

- 10) A square is made using four rods of equal length joined end to end.  
The perimeter of this square is 72 cm.  
Three of these rods are now joined end to end to make an equilateral triangle.

What is the perimeter of this equilateral triangle?  
You must show all your working.

[3 + 2 OCW]

.....

.....

.....

.....

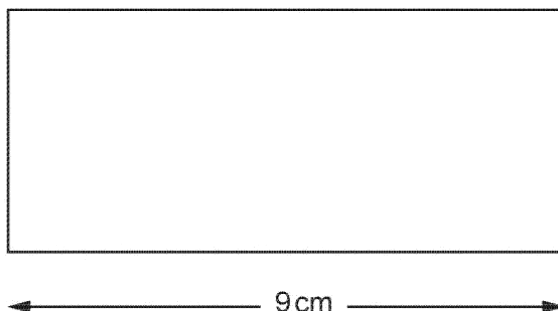
.....

.....

.....

*You will be assessed on the quality of your written communication in this question.*

11)



*Diagram not drawn to scale*

The area of this rectangle is  $45 \text{ cm}^2$ .  
Calculate the perimeter of the rectangle.  
You must show all your working.

.....

.....

.....

.....

.....

.....