

Perimeter

For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **28**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

1 Here is a rectangle.

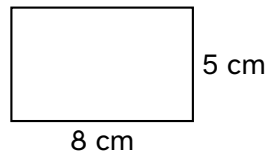


Diagram **NOT** accurately drawn

Tomasz makes a new rectangle by doubling the length and doubling the width of this rectangle.

He says,

“The new rectangle will have 4 times the perimeter.”

Is Tomasz correct?

You must show how you get your answer.

(2)

(Total for Question 1 is 2 marks)

- 2 The diagram shows a shape made from two rectangles.
All the corners are right angles.

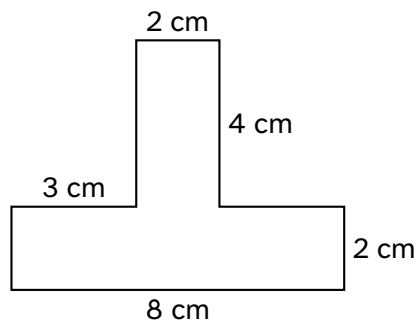


Diagram **NOT** accurately drawn

Work out the perimeter of the shape.

..... cm
(3)

(Total for Question 2 is 3 marks)

- 3 The length of a rectangle is 5 cm more than its width.
The perimeter of the rectangle is 38 cm.
Work out the length and the width of the rectangle.

length cm width cm
(3)

(Total for Question 3 is 3 marks)

- 4 A square has sides of length 7 cm.
A rectangle has the same perimeter as the square.
The length of the rectangle is 10 cm.
Work out the width of the rectangle.

..... cm
(3)

(Total for Question 4 is 3 marks)

- 5 The diagram shows a shape made from 5 identical equilateral triangles.
The perimeter of the shape is 35 cm.

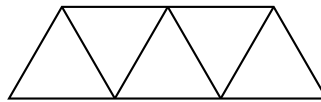


Diagram **NOT** accurately drawn

Work out the perimeter of one triangle.

..... cm
(3)

(Total for Question 5 is 3 marks)

- 6** A regular hexagon has sides of length $(2x + 1)$ cm.
The perimeter of the hexagon is 42 cm.
Work out the value of x .

$x = \dots\dots\dots$
(2)

(Total for Question 6 is 2 marks)

- 7 Here is a parallelogram.
All the measurements are in centimetres.

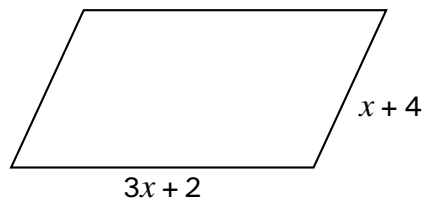


Diagram **NOT** accurately drawn

- (a) Write an expression, in terms of x , for the perimeter of the parallelogram.
Give your answer in its simplest form.

..... cm
(2)

- (b) The perimeter of the parallelogram is 44 cm.
Work out the length of the longest side of the parallelogram.

..... cm
(2)

(Total for Question 7 is 4 marks)

- 8 The diagram shows an isosceles triangle and a square.

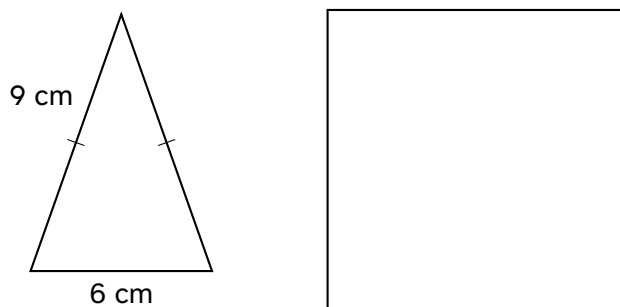


Diagram **NOT** accurately drawn

perimeter of the triangle : perimeter of the square = 3:5
Work out the length of one side of the square.

..... cm
(4)

(Total for Question 8 is 4 marks)

- 9 A field is a rectangle 45 m long and 28 m wide.
Fencing is needed all the way round the field.
Fencing is sold in rolls. Each roll is 5 m long and costs £18.50

Work out the cost of the fencing.

£
(4)

(Total for Question 9 is 4 marks)
