

Enlargements

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

Name _____

Total marks: **21**

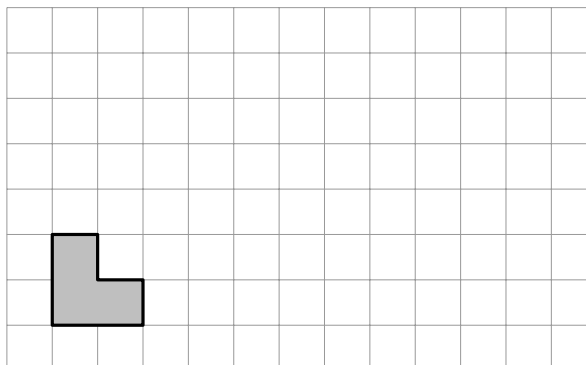
Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

- 1** A rectangle is 4 cm long and 3 cm wide.
The rectangle is enlarged by scale factor 2.5
Work out the length and the width of the enlarged rectangle.

..... cm by _____ cm
(2)

(Total for Question 1 is 2 marks)

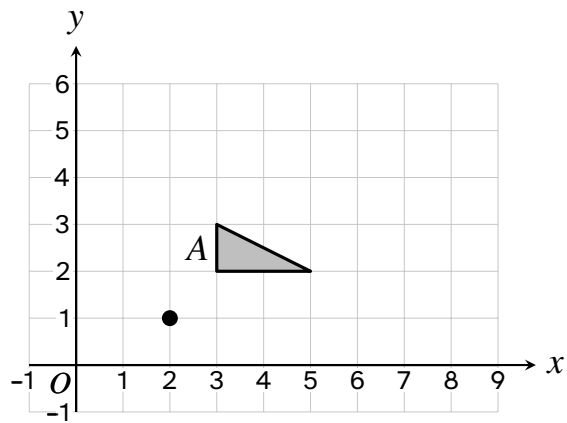
- 2** On the grid, enlarge the shaded shape by scale factor 3



(2)

(Total for Question 2 is 2 marks)

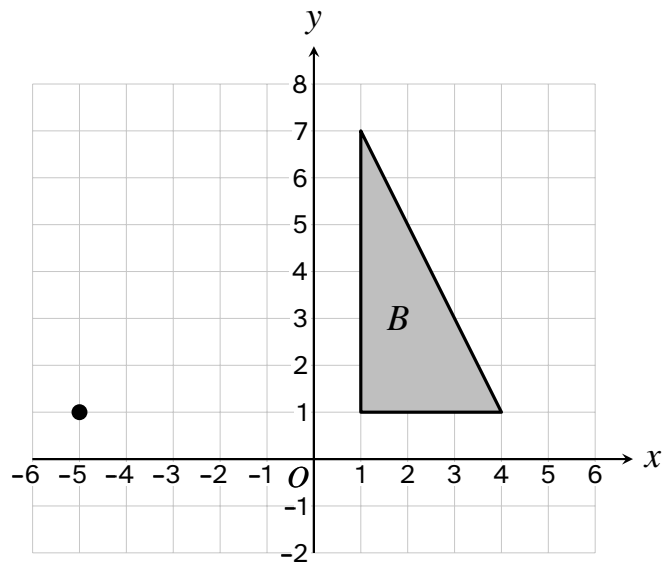
- 3 On the grid, enlarge triangle *A* by scale factor 2, centre (2, 1)



(2)

(Total for Question 3 is 2 marks)

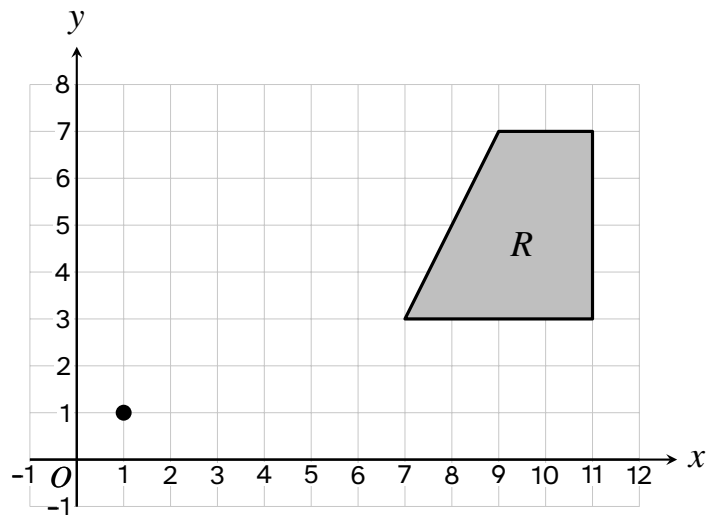
- 4 On the grid, enlarge triangle *B* by scale factor $\frac{1}{3}$, centre $(-5, 1)$



(2)

(Total for Question 4 is 2 marks)

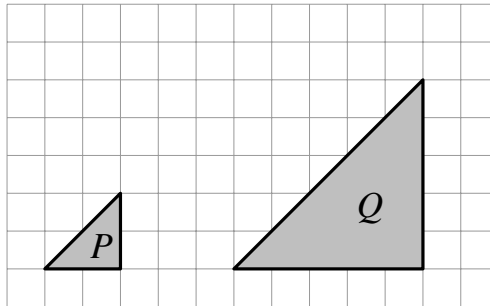
- 5 On the grid, enlarge shape R by scale factor $\frac{1}{2}$, centre $(1, 1)$



(2)

(Total for Question 5 is 2 marks)

- 6 Triangle Q is an enlargement of triangle P .



- (a) Write down the scale factor of the enlargement.

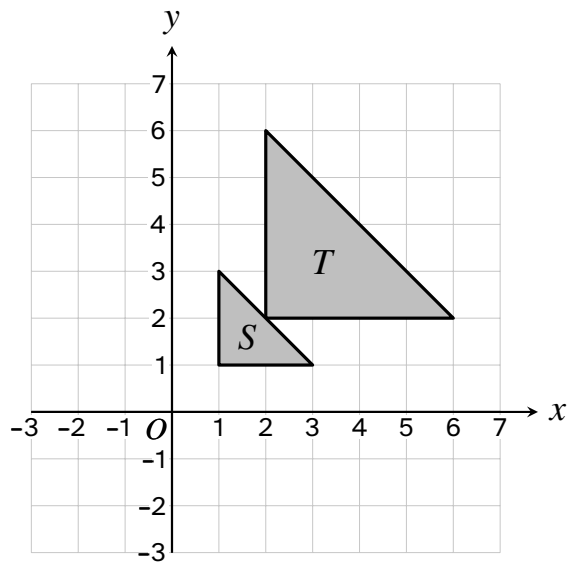
.....
(1)

- (b) Lucy says,
‘The scale factor is 3, because the base of Q is 3 squares longer than the base of P .’
Explain why Lucy is wrong.

.....
.....
(1)

(Total for Question 6 is 2 marks)

- 7** Describe fully the single transformation that maps triangle S onto triangle T .



(2)

(Total for Question 7 is 2 marks)

- 8** A shape has a perimeter of 14 cm.
The shape is enlarged by scale factor 3
Work out the perimeter of the enlarged shape.

..... cm
(2)

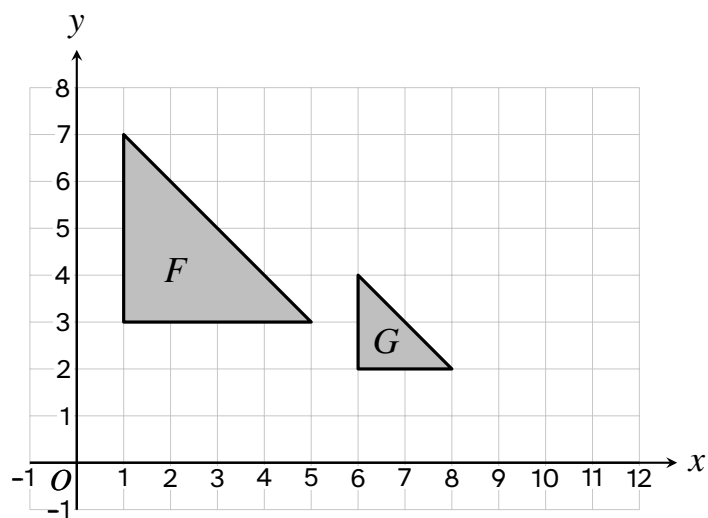
(Total for Question 8 is 2 marks)

- 9 Triangle K has angles of 35° , 60° and 85° .
Triangle K is enlarged by scale factor 4 to give triangle L .
Write down the size of the largest angle in triangle L .

.....
(1)

(Total for Question 9 is 1 mark)

- 10 Triangle F and triangle G are drawn on the grid.



Describe fully the single transformation that maps triangle F onto triangle G .

(2)

(Total for Question 10 is 2 marks)

- 11** A photograph is 6 cm wide and 4 cm high.
The photograph is enlarged so that it is 15 cm wide.
Work out the height of the enlarged photograph.

..... cm
(2)

(Total for Question 11 is 2 marks)
