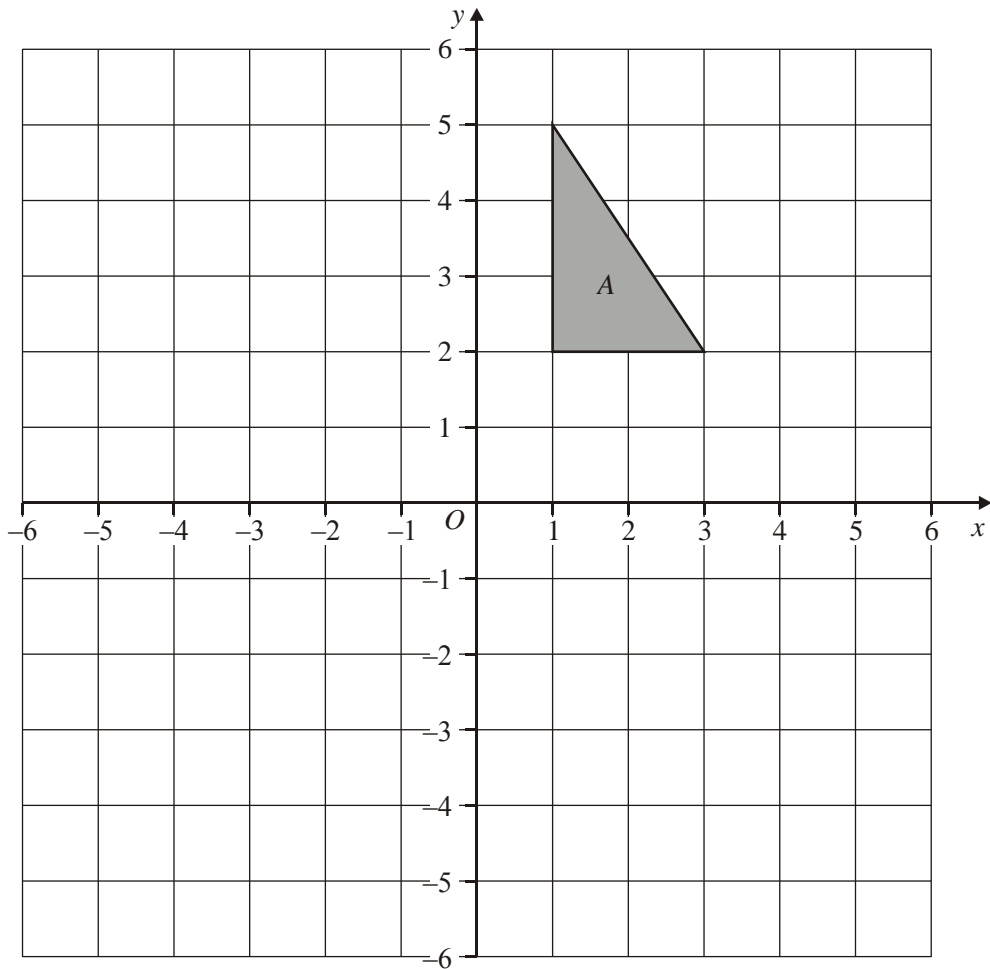


Translation, Enlargement, Rotation and Reflection (TERRY)

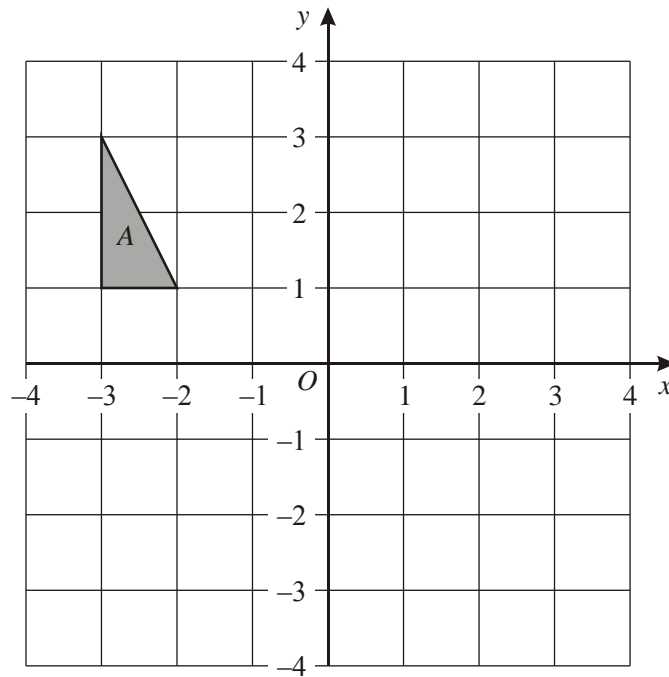
1. Triangle A has vertices (1,2), (1,5) and (3,2).



Draw the new position of triangle A after a rotation of 90° clockwise about the origin.

(Total 3 marks)

2. Triangle A is drawn on the grid below.



- (a) Reflect triangle A in the x -axis.
Label the triangle B .

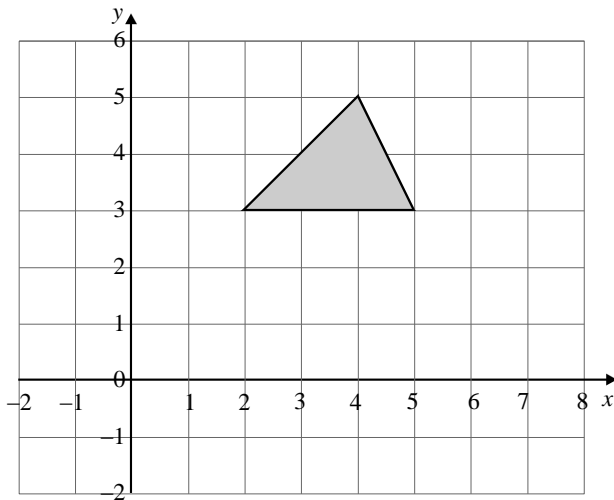
(1)

- (b) Rotate triangle A 90° clockwise about the origin O .
Label the triangle C .

(2)

(Total 3 marks)

3. (a)



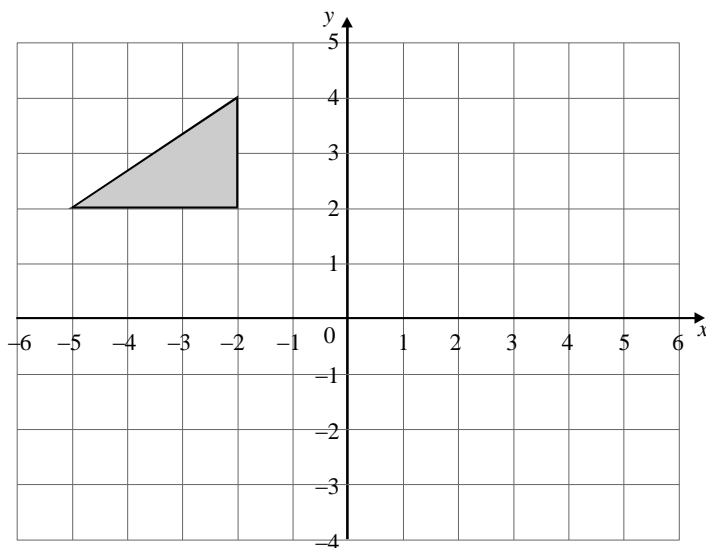
(i) Draw the line $y = 2$ on the grid above.

(1)

(ii) Reflect the shaded triangle in the line $y = 2$.

(1)

(b)



(i) Translate the shaded triangle by the vector $\begin{pmatrix} 5 \\ -4 \end{pmatrix}$

Label this triangle C.

(2)

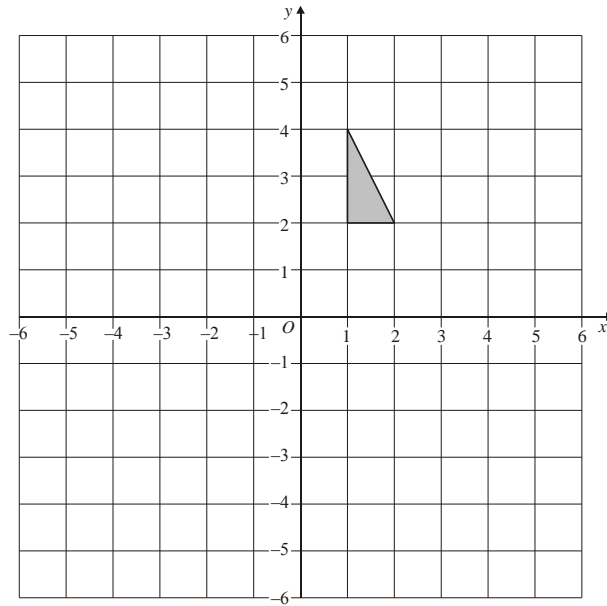
(ii) Rotate the shaded triangle through 90° clockwise about $(-1, 1)$

Label this triangle D.

(2)

(Total 6 marks)

4.



- (a) Reflect the shaded triangle in the line $y = -x$.
Label this new triangle with the letter *A*.

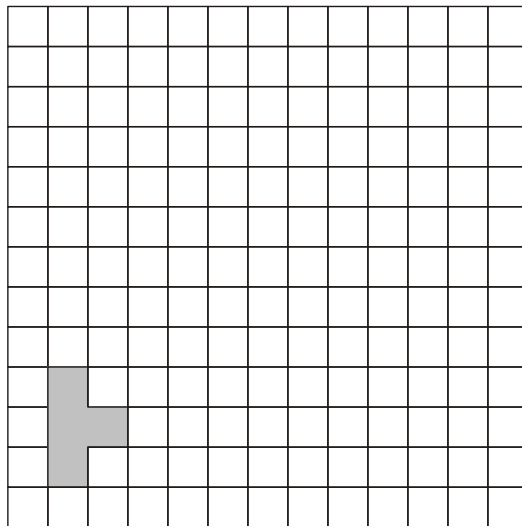
(2)

- (b) Rotate the original shaded triangle by a quarter-turn anticlockwise about (0,2).
Label this new triangle with the letter *B*.

(2)

(Total 4 marks)

5. (a) Enlarge the shaded shape by a scale factor of 3.



(2)

- (b) How many times bigger is the area of the enlarged shape than the area of the small shape?

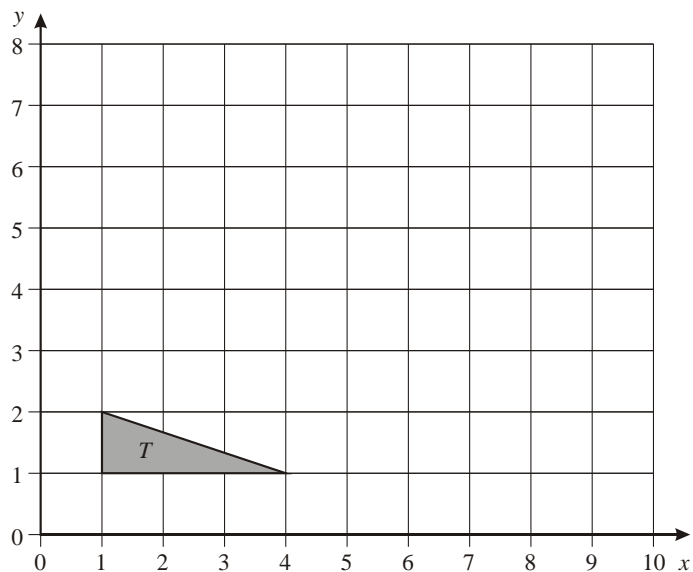
.....
.....

Answer

(2)

(Total 4 marks)

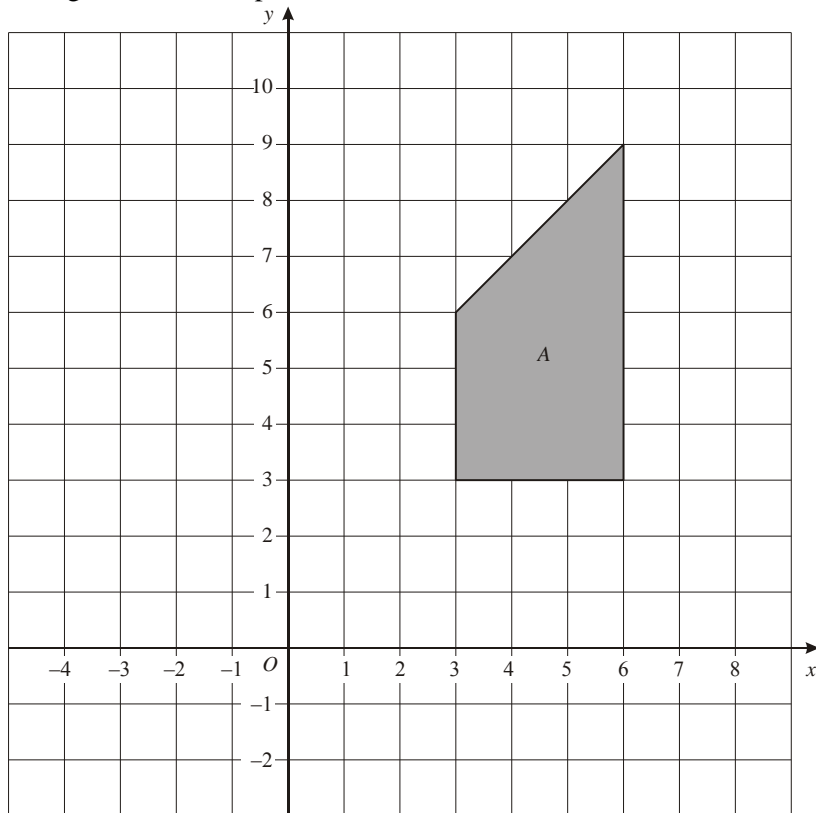
6. The vertices of triangle T are $(1, 1)$, $(1, 2)$ and $(4, 1)$.



Enlarge triangle T by scale factor 2, with $(0, 0)$ as the centre of enlargement.

(Total 3 marks)

7. The diagram shows shape

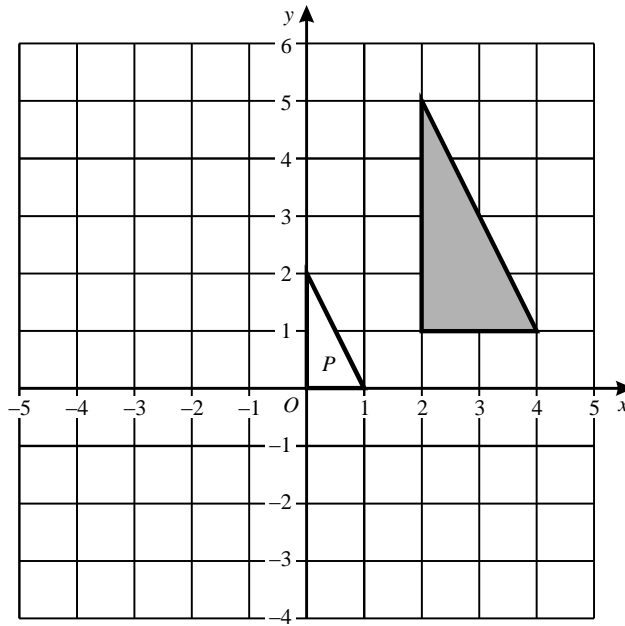


A.

Draw the enlargement of shape A with scale factor $\frac{1}{3}$ and centre of enlargement $(0,0)$.

(Total 2 marks)

8. Triangle P is an enlargement of the shaded triangle.



(a) What is the scale factor of the enlargement?

Answer

(1)

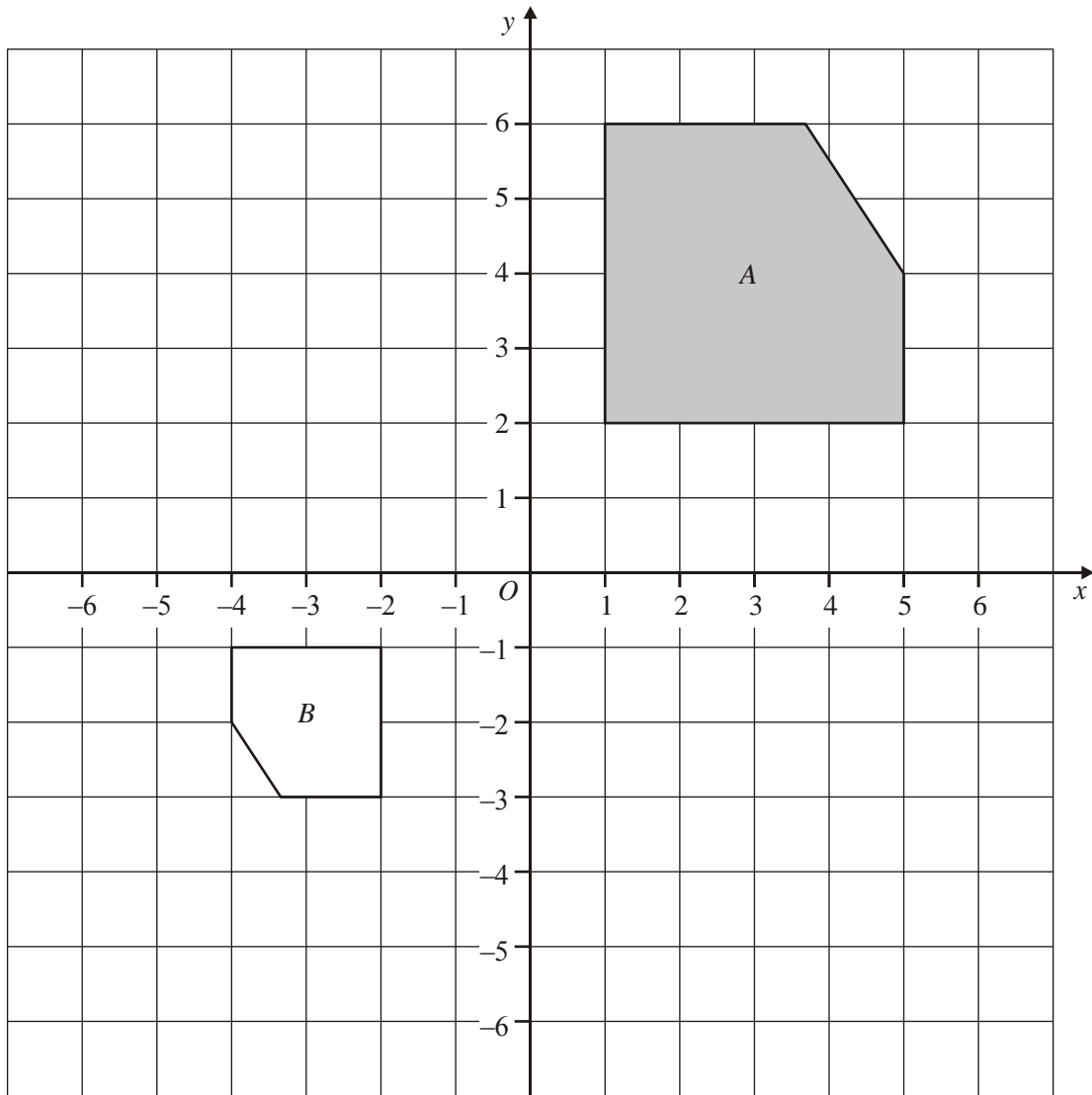
(b) What is the centre of enlargement?

Answer (.....,))

(1)

(Total 2 marks)

9. In the diagram, shape B is an enlargement of the shaded shape A .



- (a) Write down the coordinates of the centre of enlargement.

Answer

(1)

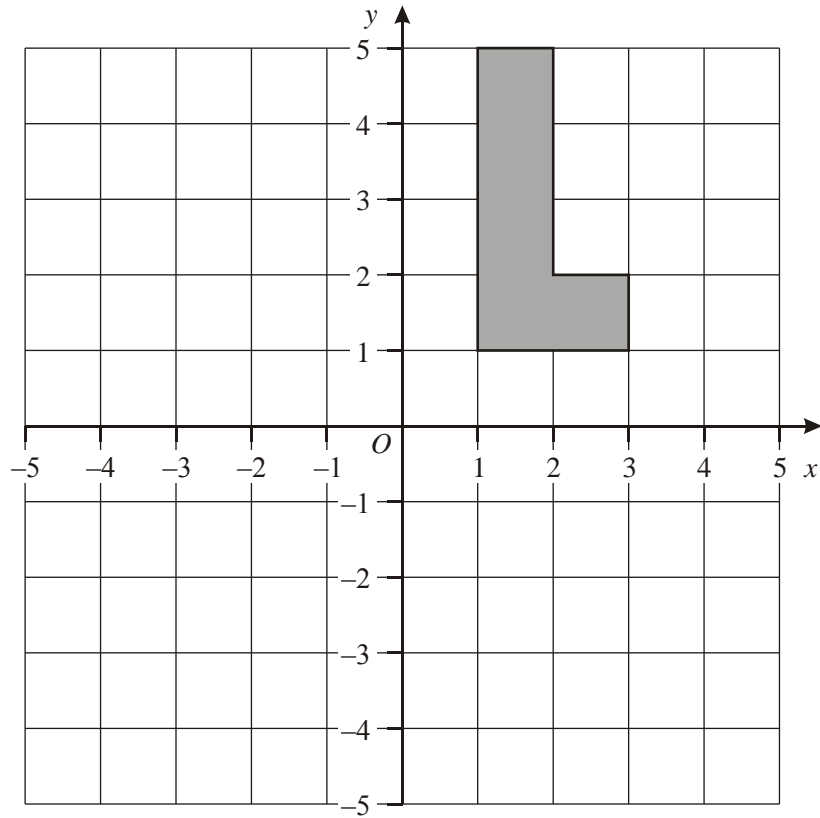
- (b) Write down the scale factor of the enlargement.

Answer

(1)

(Total 2 marks)

10.



Enlarge the shaded shape by scale factor $-\frac{1}{2}$ with centre of enlargement $(-1, 0)$.

(Total 2 marks)