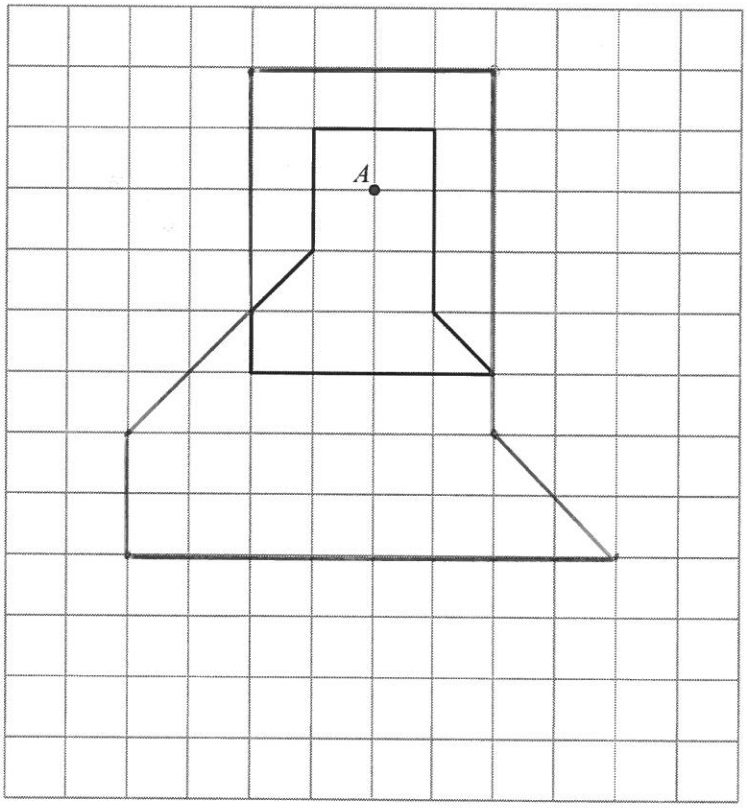
Walking Talking - Transformations

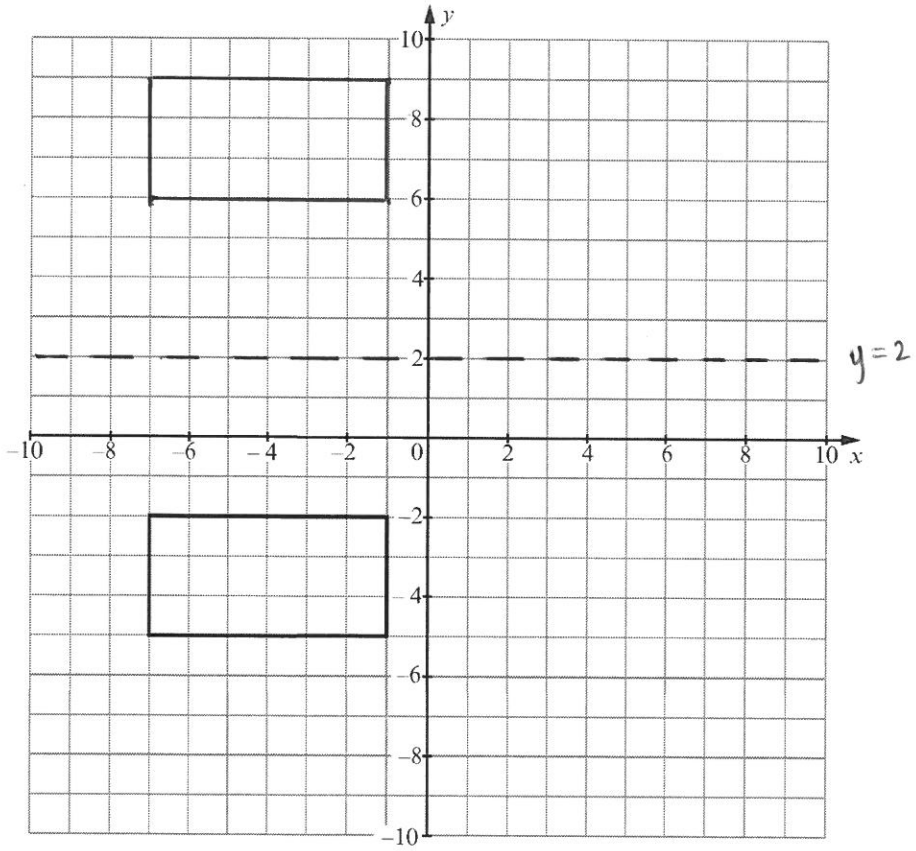
1.

(a) Enlarge the shape shown on the grid by a scale factor of 2 using A as the centre for the enlargement.



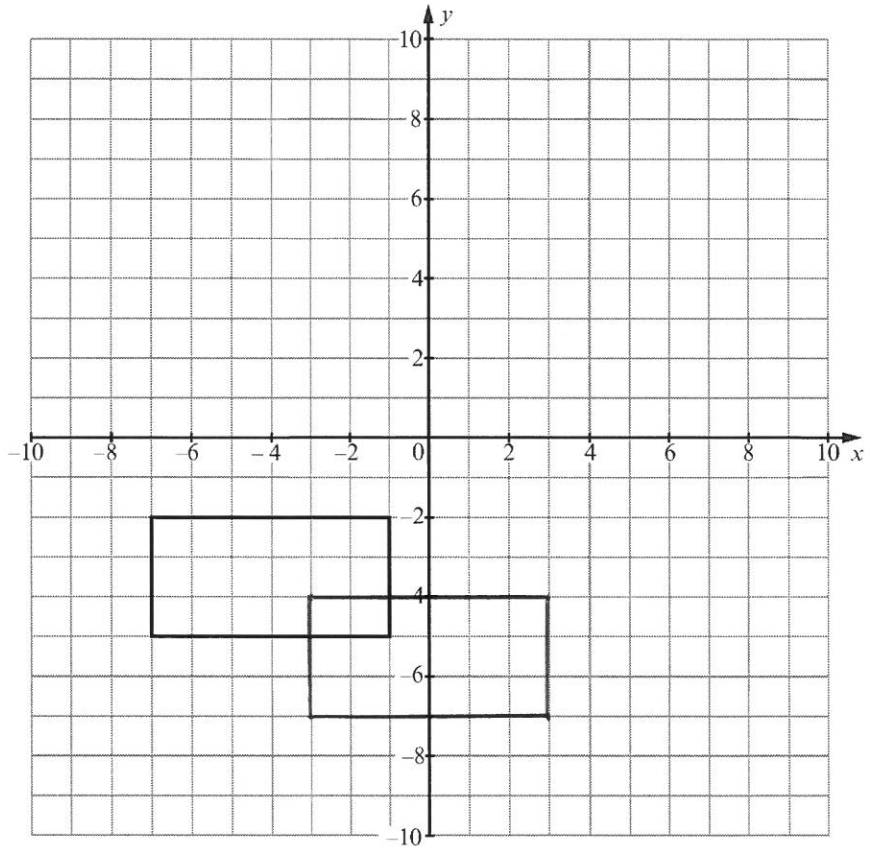
[3]

(b) Reflect the rectangle in the line $y = 2$.



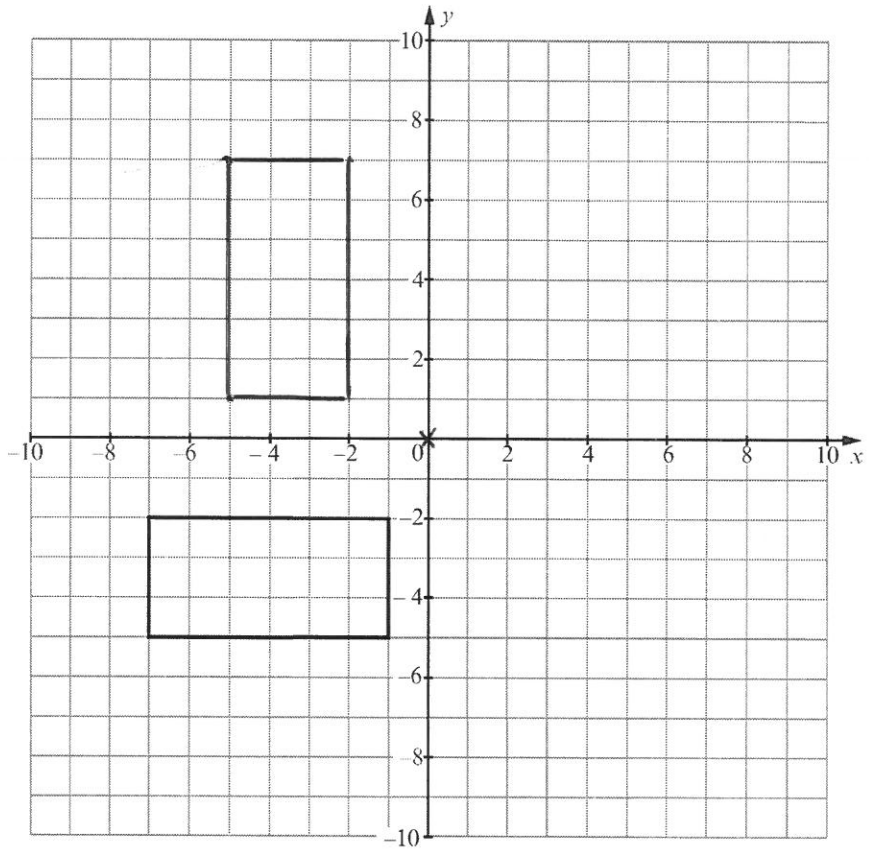
[2]

(c) Translate the rectangle shown below by $\begin{pmatrix} 4 \\ -2 \end{pmatrix}$.



[1]

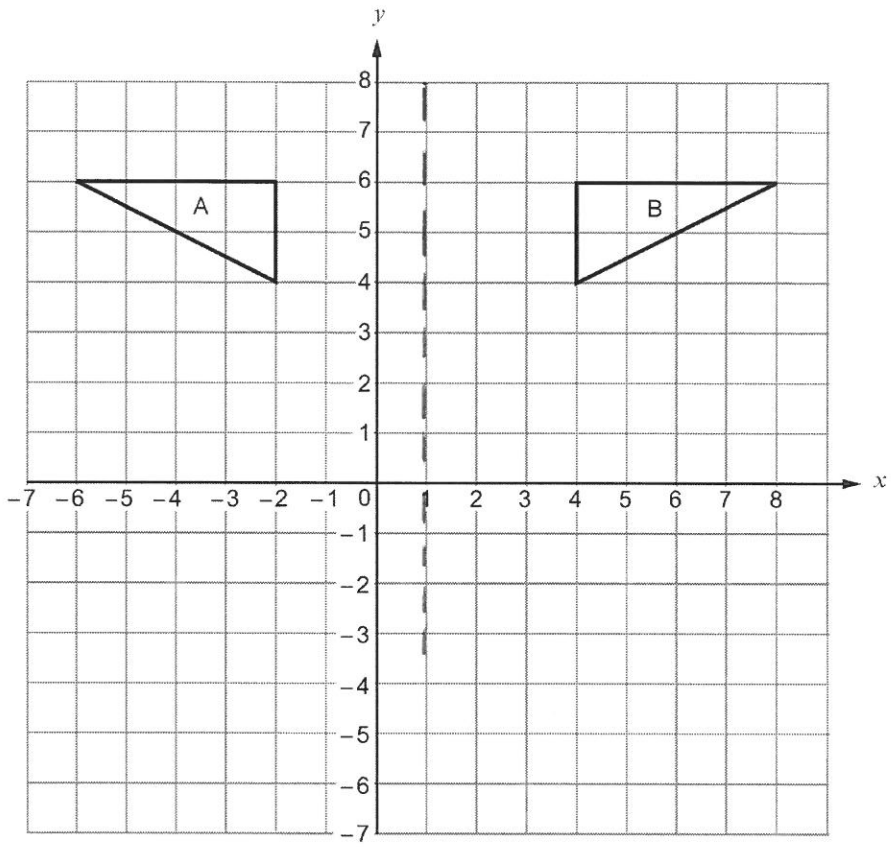
(d) Rotate the rectangle shown on the grid below through 90° clockwise about the origin.



[2]

2.

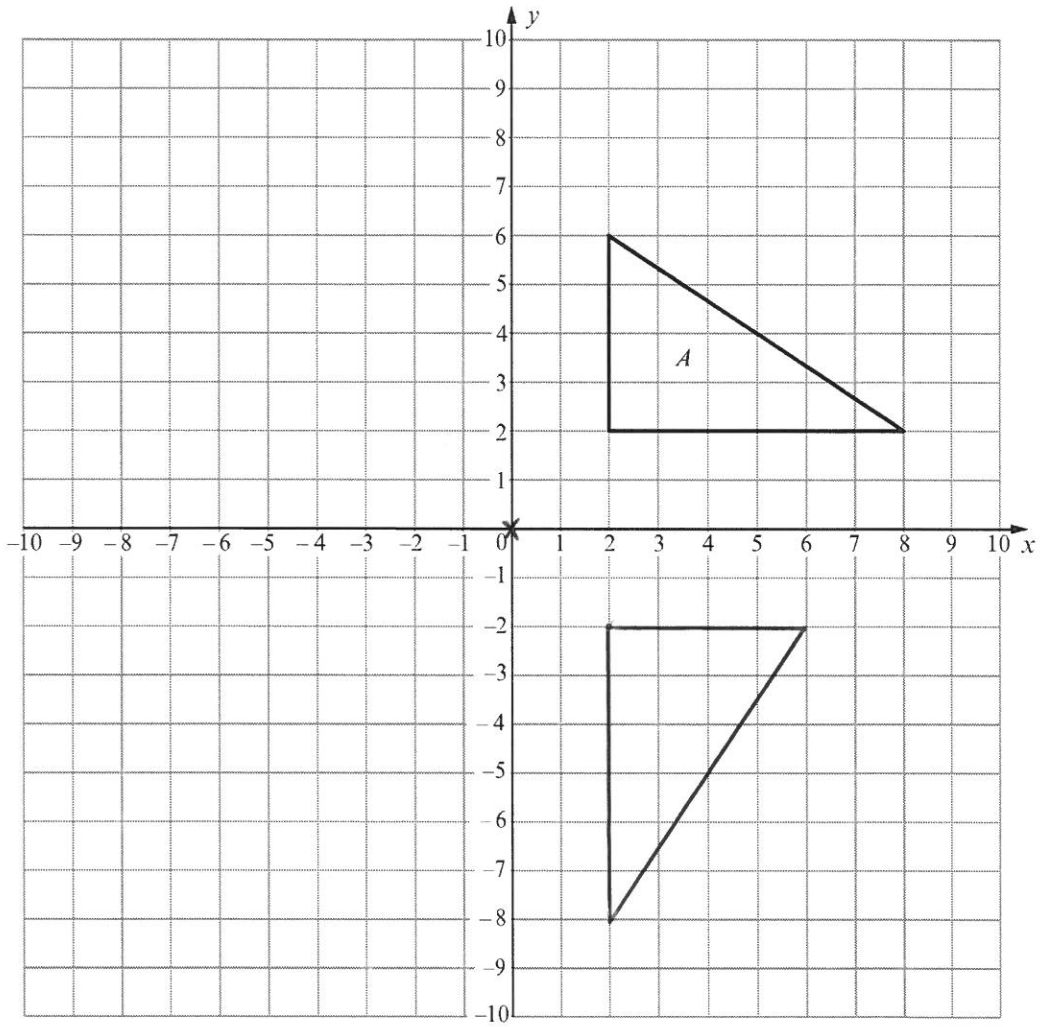
Describe **fully** the transformation which maps triangle A onto triangle B. [2]



reflection in the line $x = 1$

3.

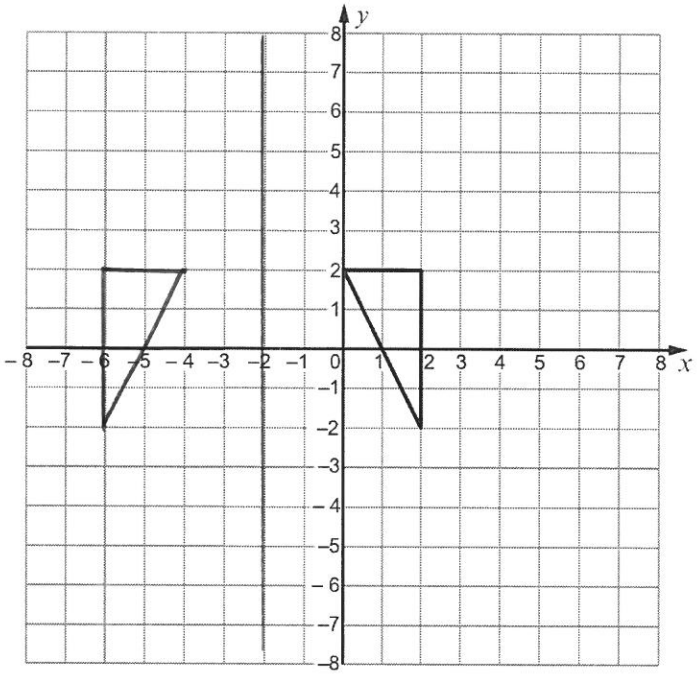
Reflect triangle A in the x-axis and label your answer B.
Then rotate your triangle B by 90° clockwise about the origin.
Label your final answer C.



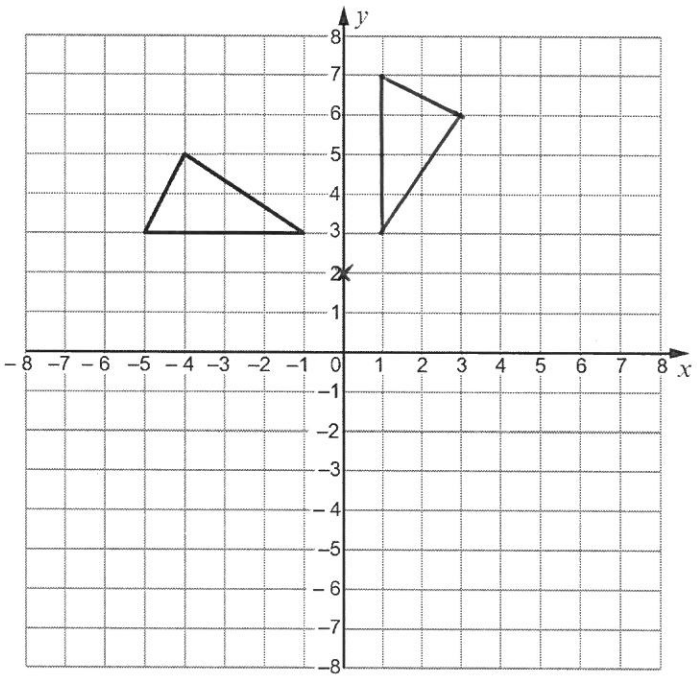
[4]

4.

(a) Reflect the triangle in the line $x = -2$. [2]

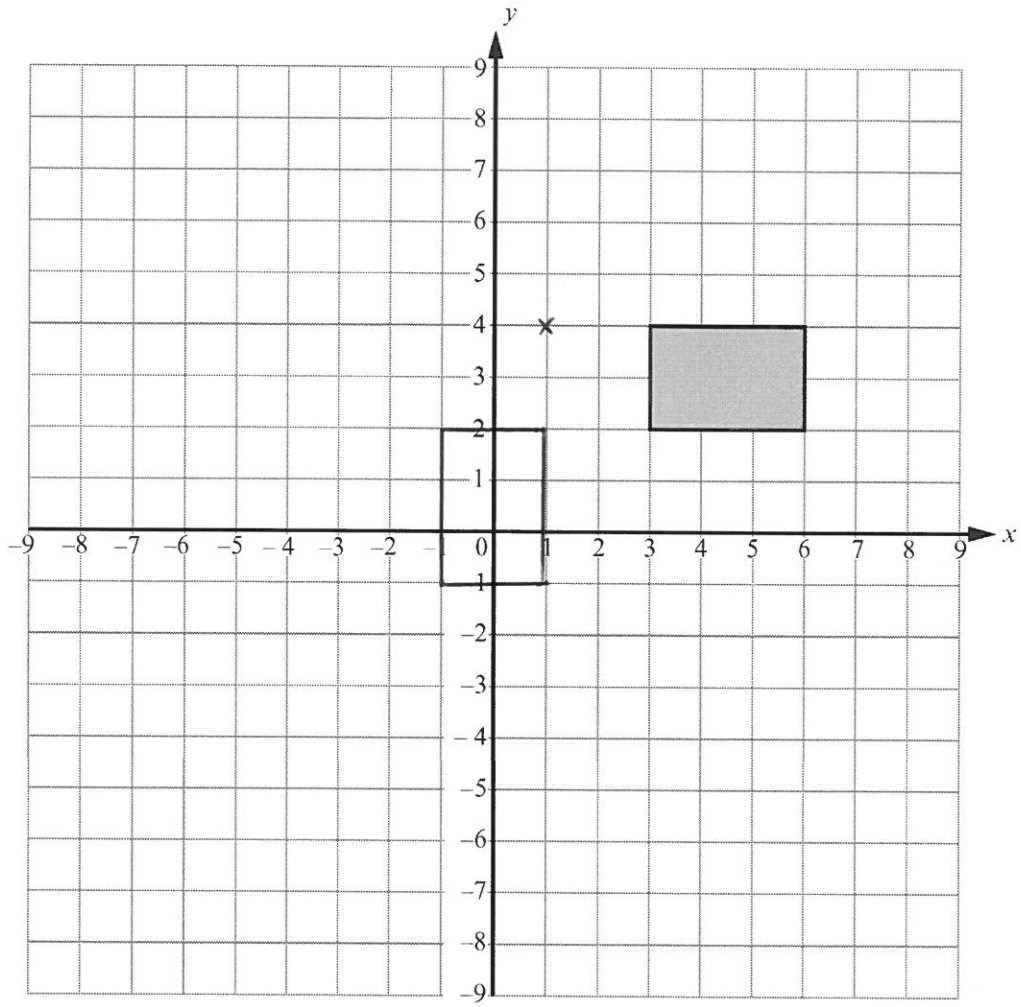


(b) Rotate the triangle clockwise through 90° about the point with coordinates (0, 2). [2]



5.

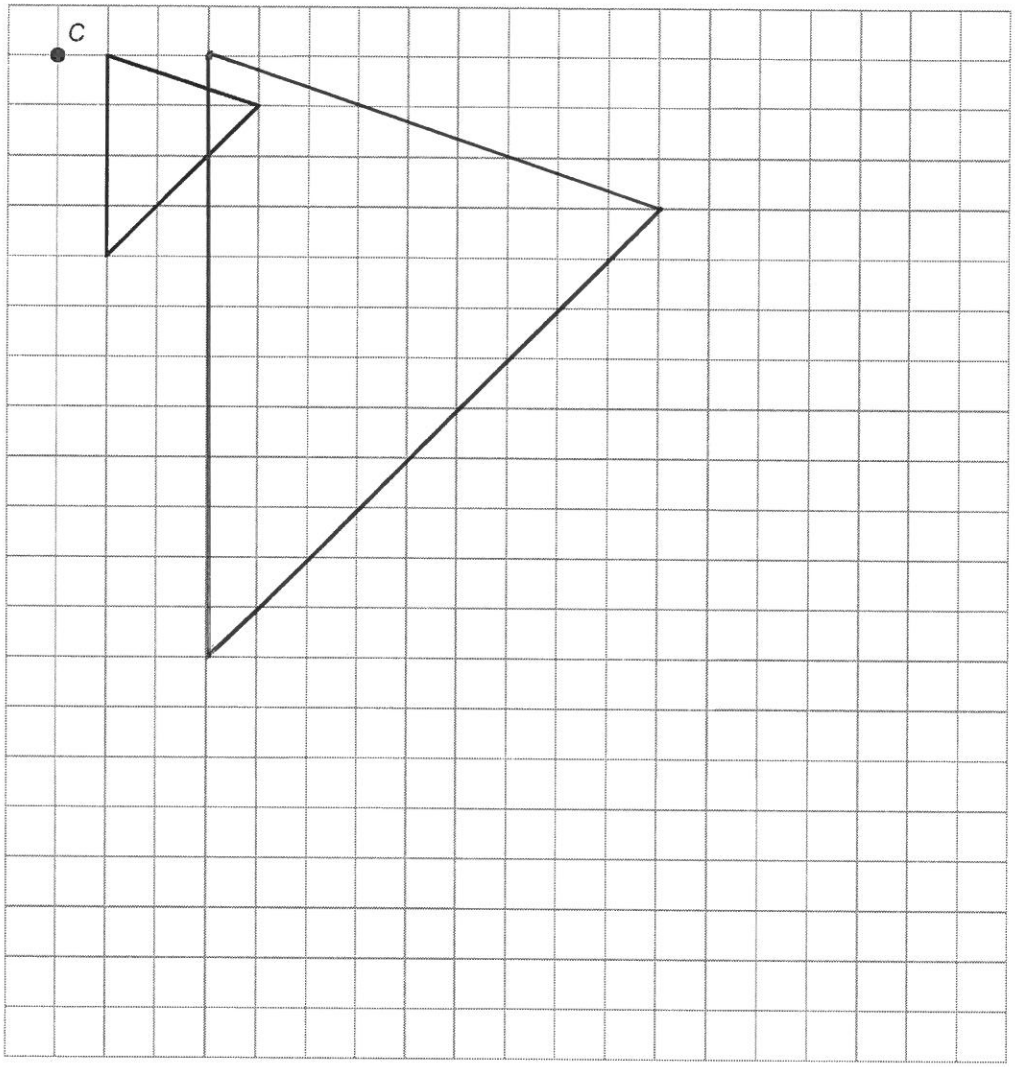
Rotate the rectangle through 90° clockwise about the point (1, 4).



[2]

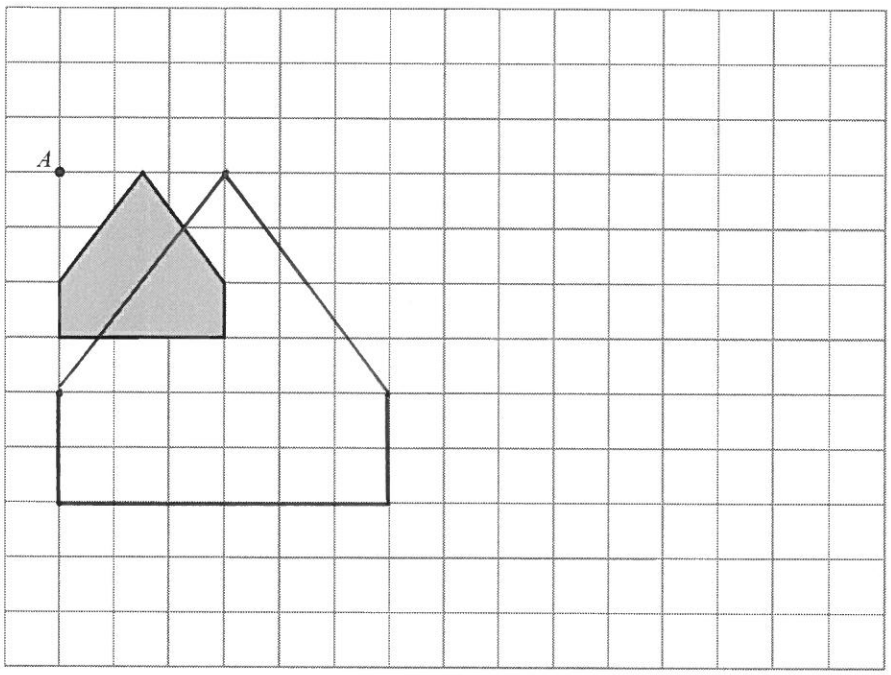
6.

Enlarge the given triangle, using scale factor 3 and centre *C*. [2]



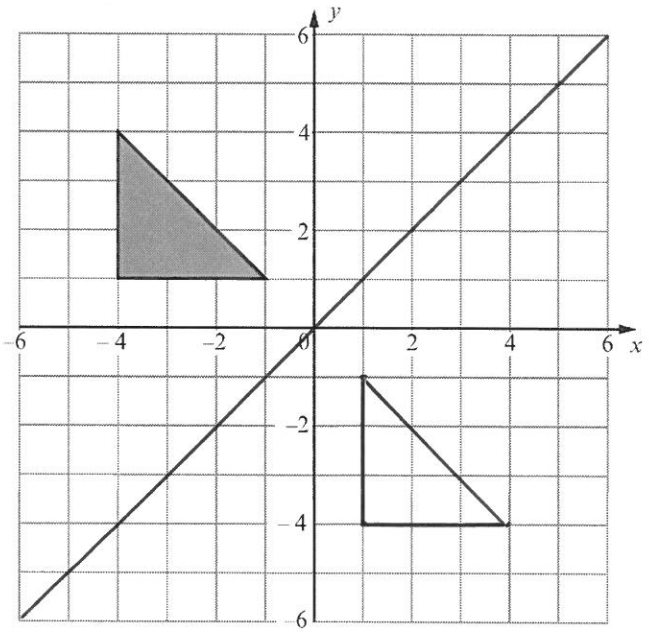
7.

(a) Enlarge the shape shown on the grid by a scale factor of 2 using A as the centre of the enlargement.



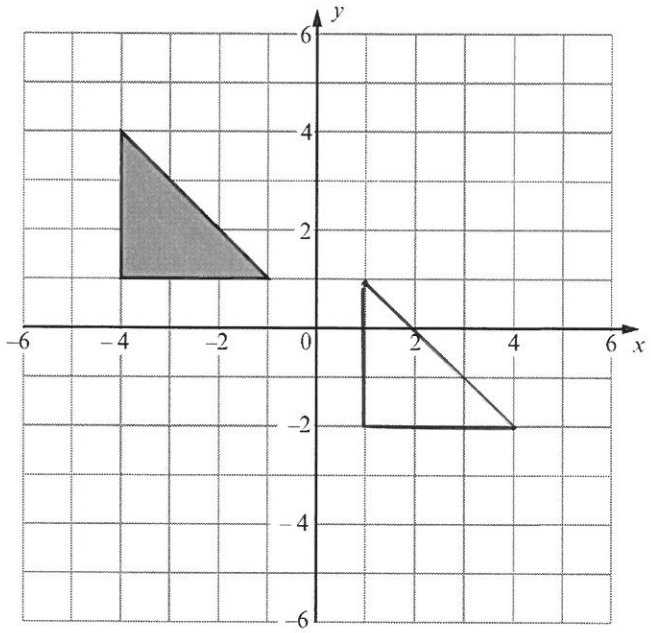
[3]

(b) Reflect the triangle in the line $y = x$.



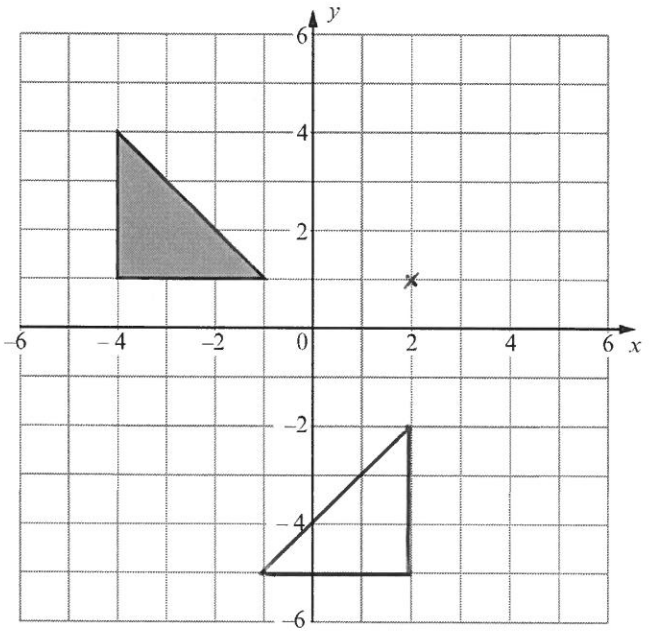
[2]

(c) Translate the triangle shown below by $\begin{pmatrix} 5 \\ -3 \end{pmatrix}$.



[1]

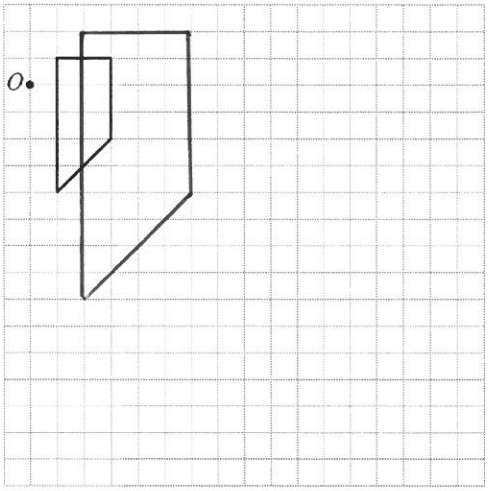
(d) Rotate the triangle shown on the grid below through 90° anticlockwise about (2, 1).



[2]

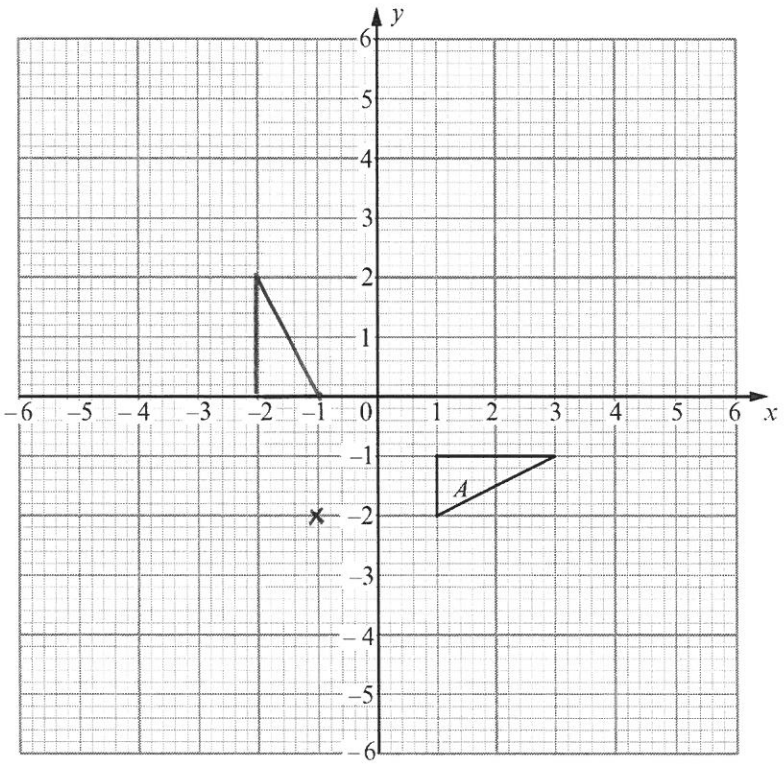
8.

(a) On the grid below, draw an enlargement of the trapezium using a scale factor of 2 and centre O.



[3]

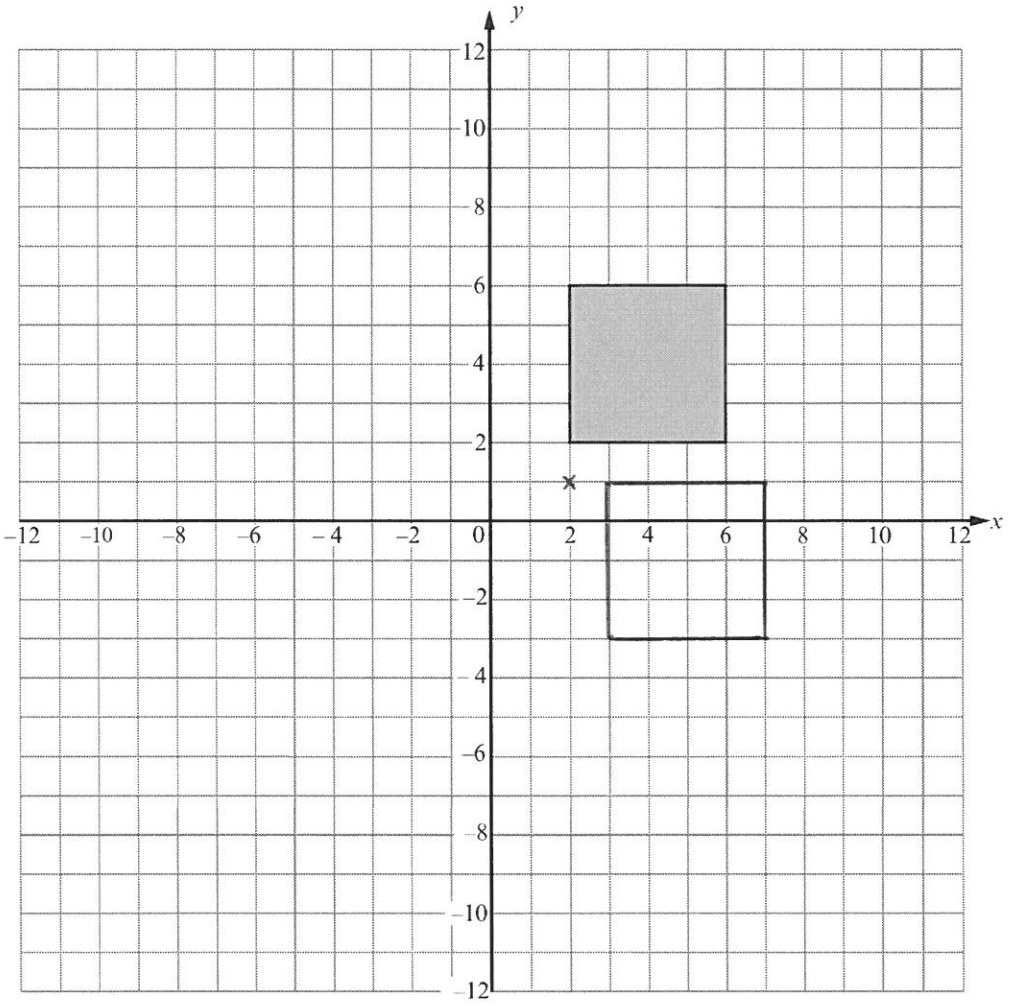
(b) Rotate the triangle A through 90° anticlockwise about the point (–1, –2).



[2]

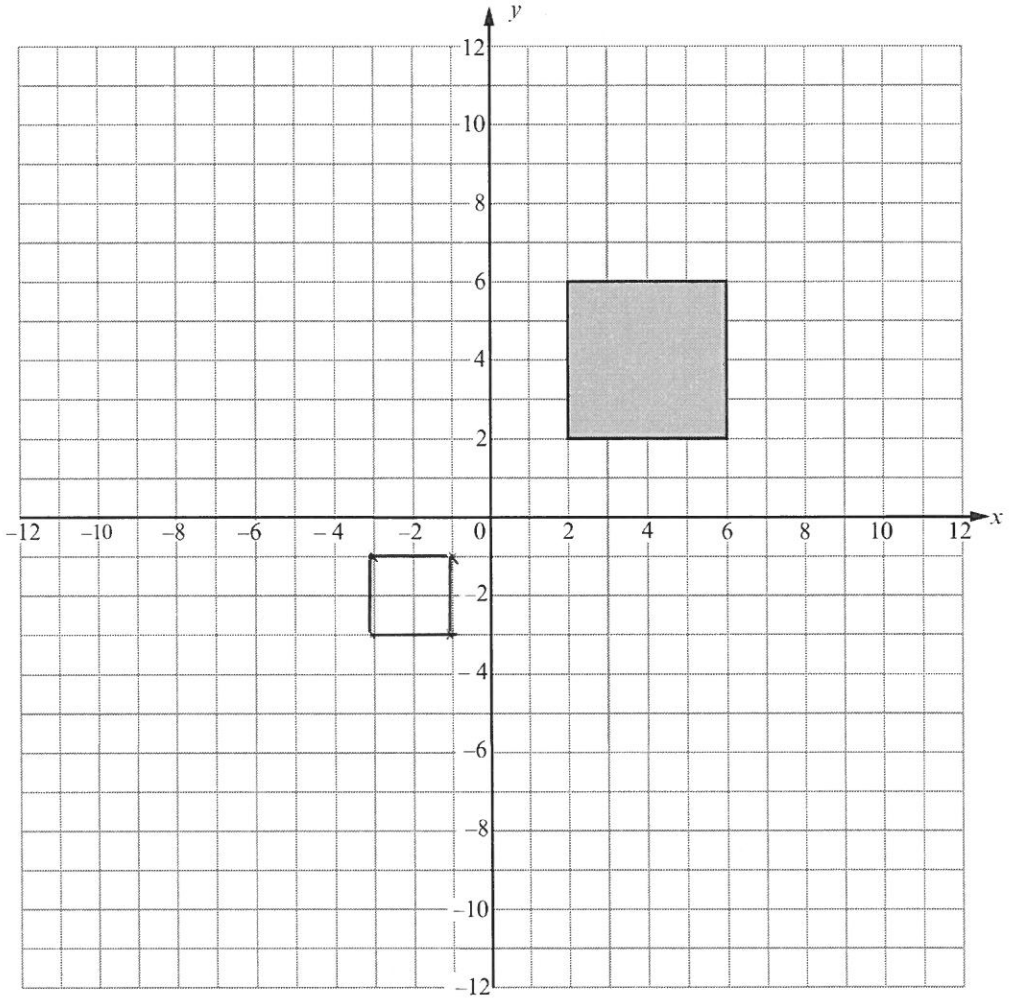
9.

(a) Rotate the square through 90° clockwise about the point (2, 1).



[2]

(b) Enlarge the square shown on the grid below by a scale factor of $-\frac{1}{2}$ using (0, 0) as the centre of enlargement.



[2]