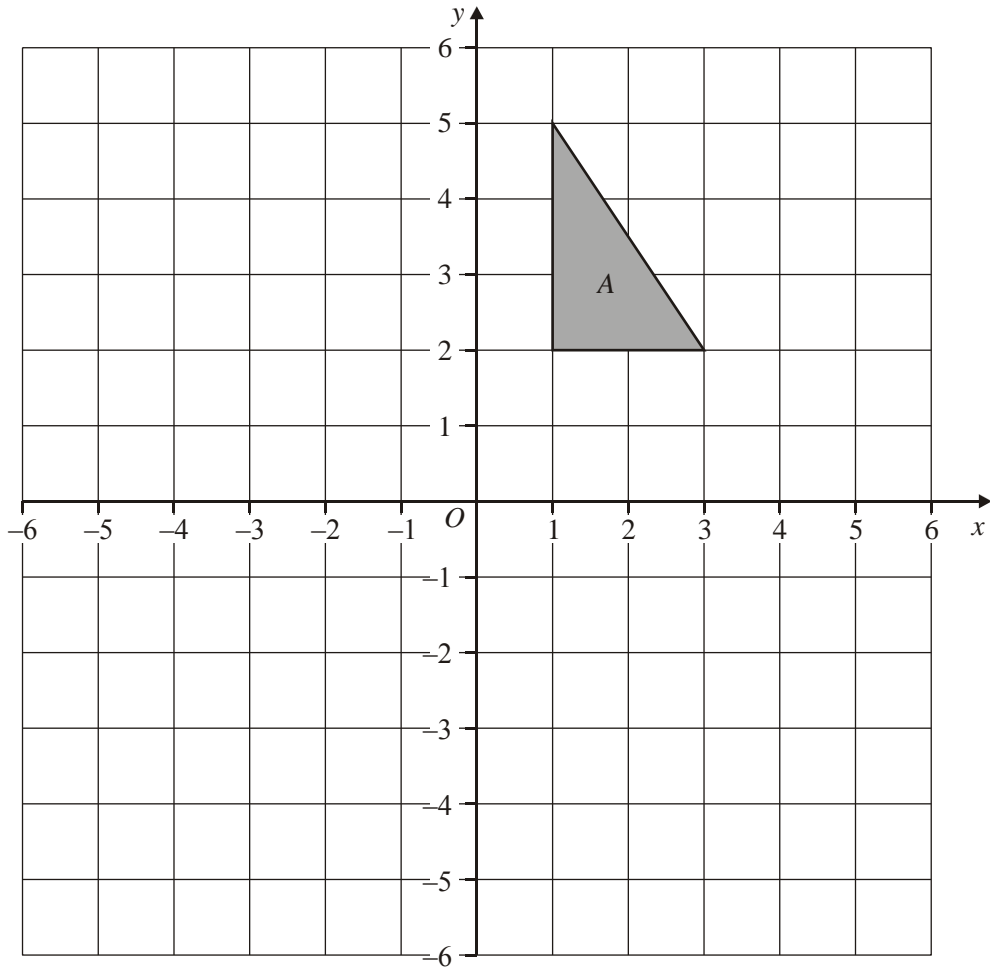


Translation, Rotation and Reflection

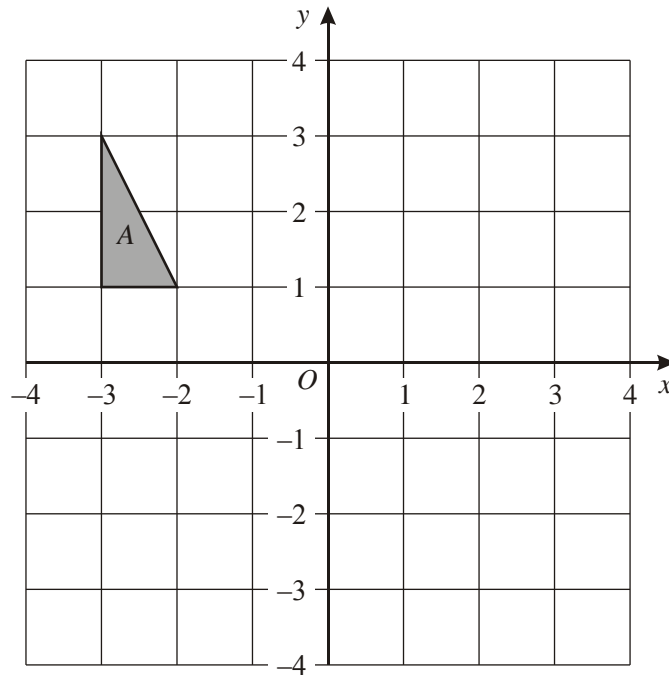
1. Triangle A has vertices (1,2), (1,5) and (3,2).



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.

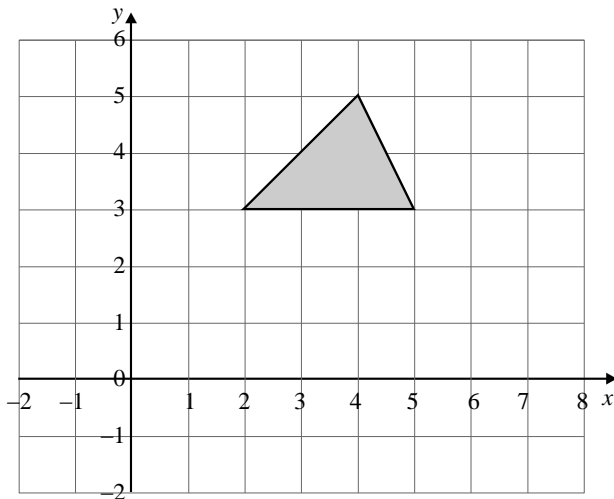
(1)

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

(2)

(Total 3 marks)

3. (a)



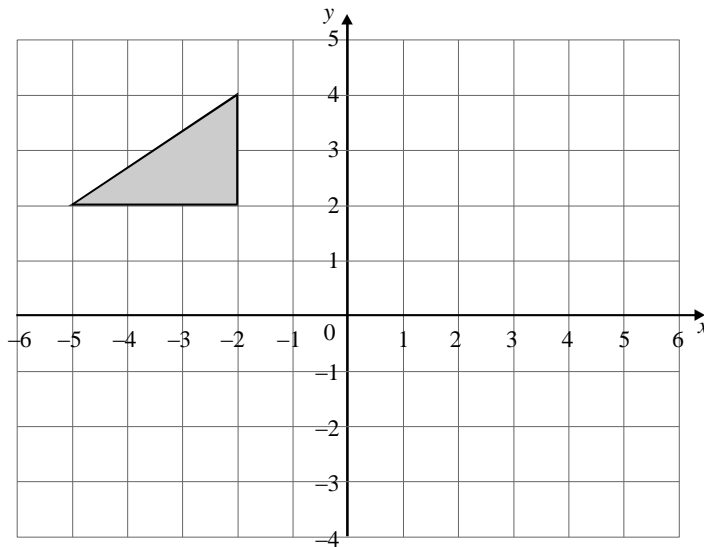
(i) Draw the line $y = 2$ on the grid above.

(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)

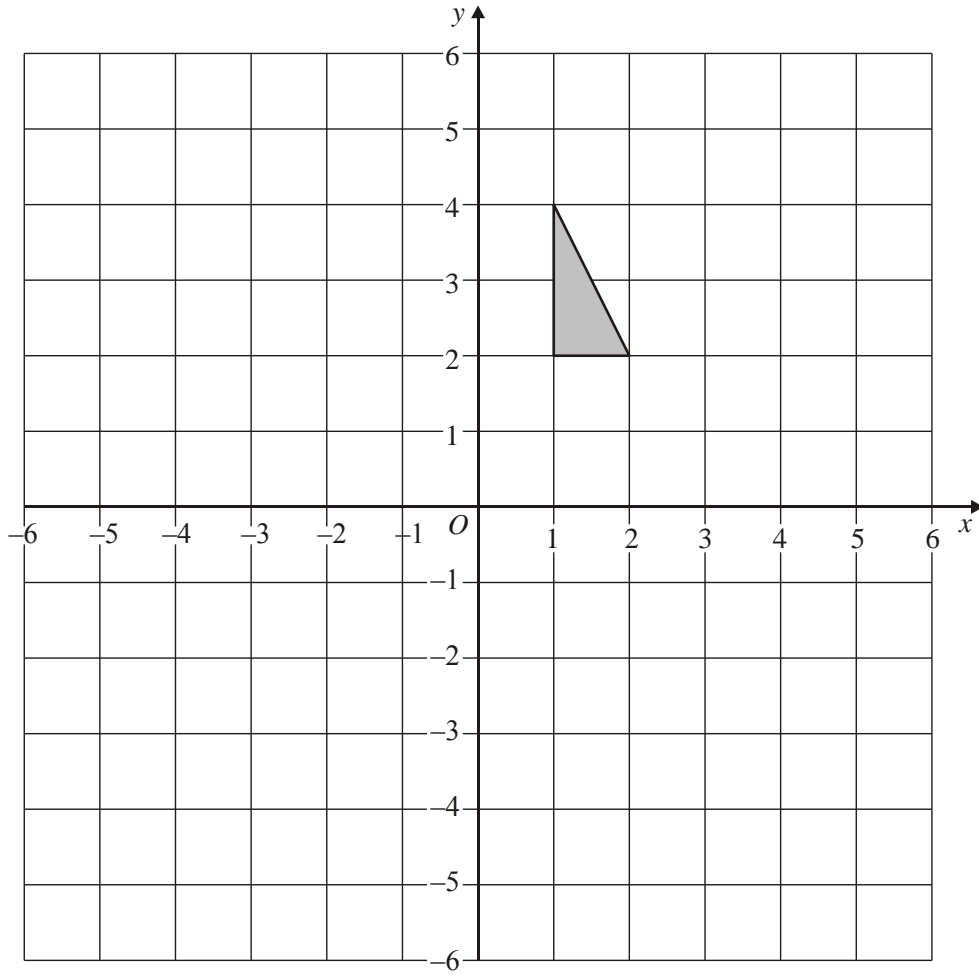
(ii) Rotate the shaded triangle through 90° clockwise about $(-1, 1)$

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)