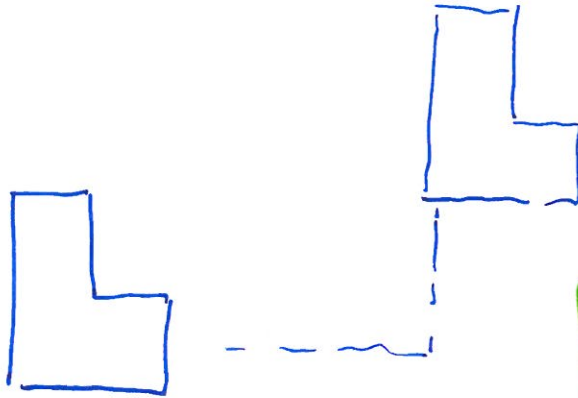
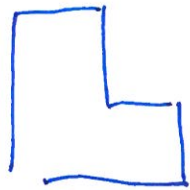


TRANSFORMATIONS

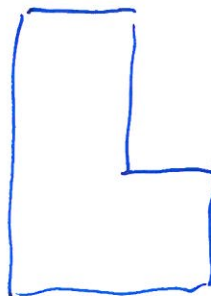
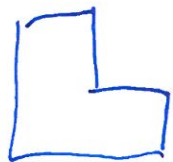
TRANSLATION



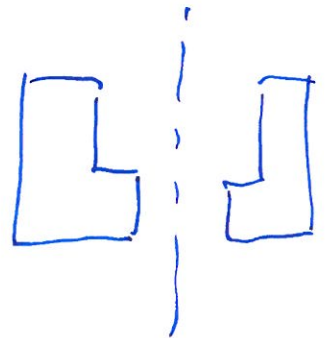
ROTATION



ENLARGEMENT



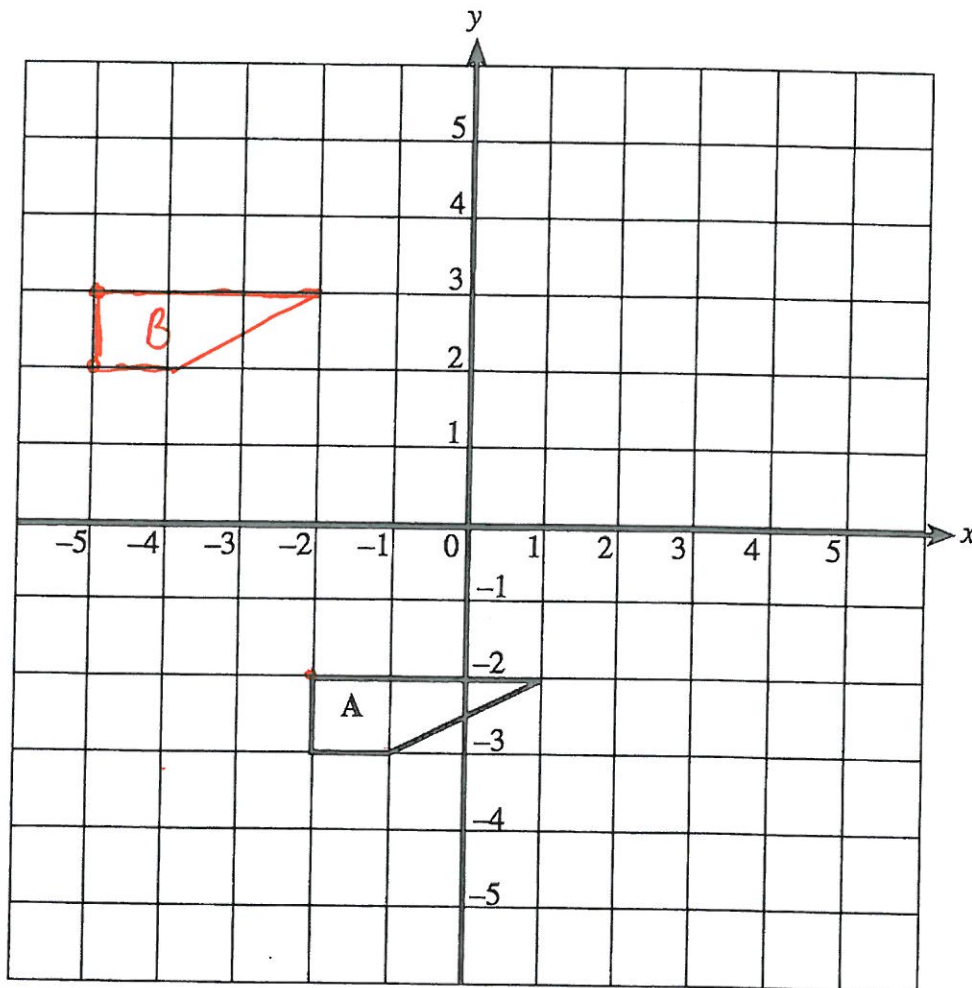
REFLECTION



TRANSFORMATIONS: (TRANSLATION, ROTATION & REFLECTION)

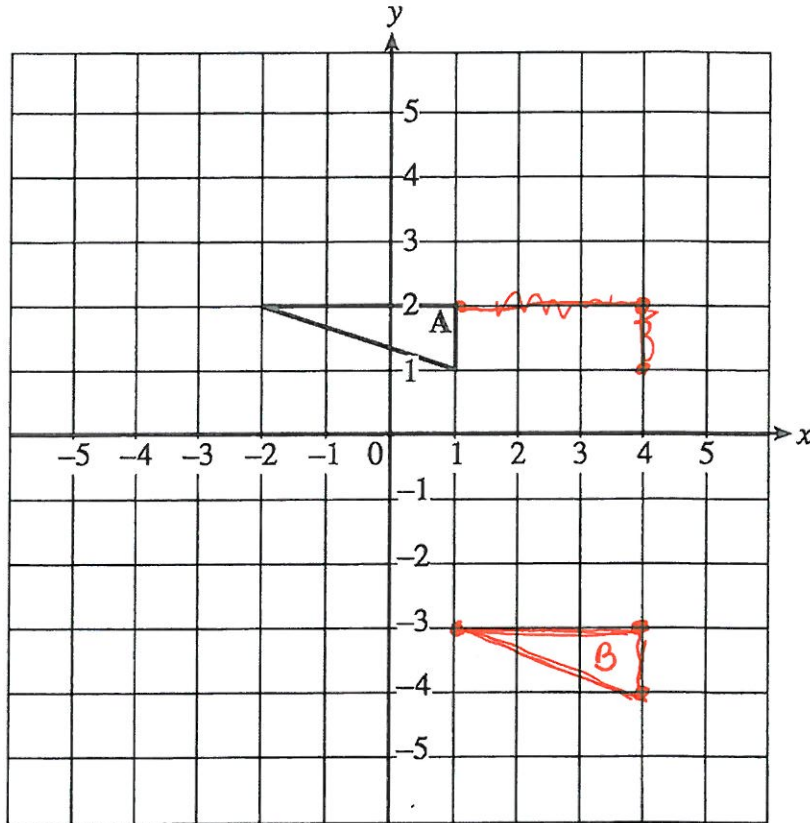
①

Draw the image of the shape A after a translation of -3 units in the x-direction and 5 in the y-direction. Label the image B. [2]

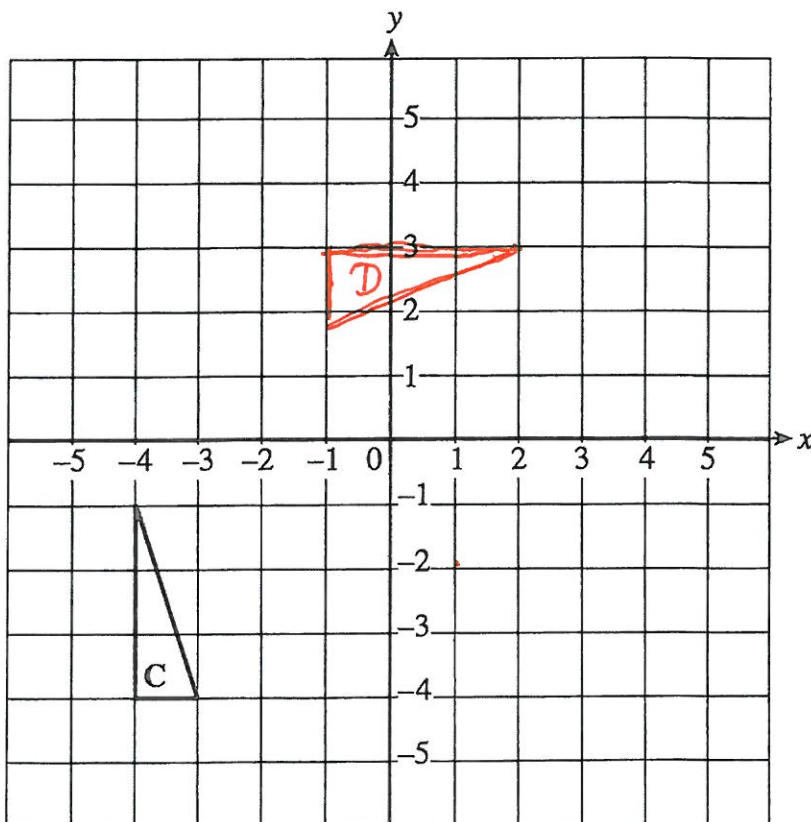


2

- (a) Draw the image of the shape A after a translation of 3 units in the x direction and -5 in the y direction. Label the image B. [2]

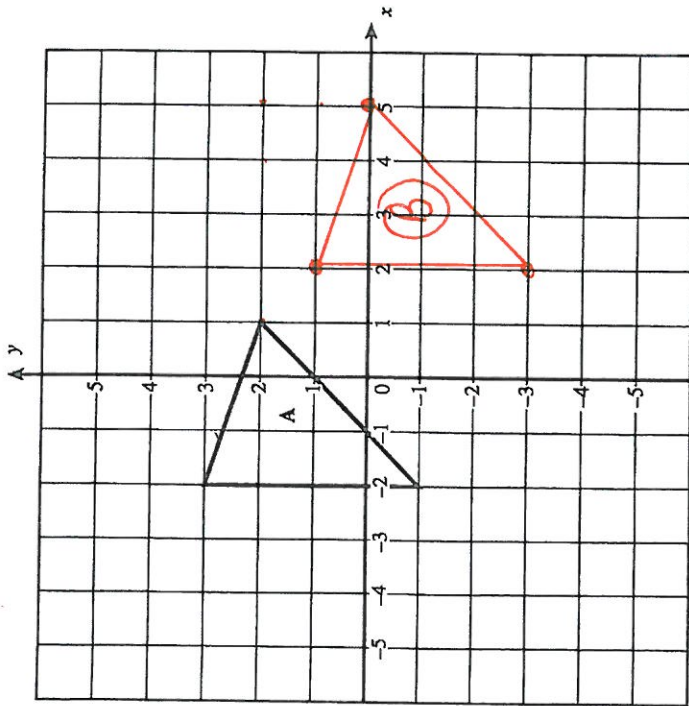


- (b) Rotate the shape C through 90° clockwise about the point $(1, -2)$. Label the image D. [2]



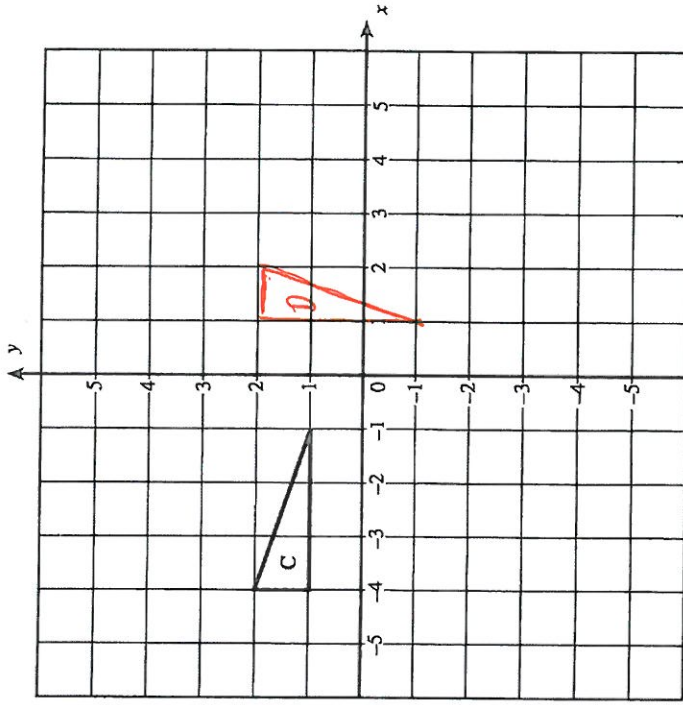
- (a) Draw the image of the triangle A after a translation of 4 units in the x direction and -2 units in the y direction. Label the image B.

[2]



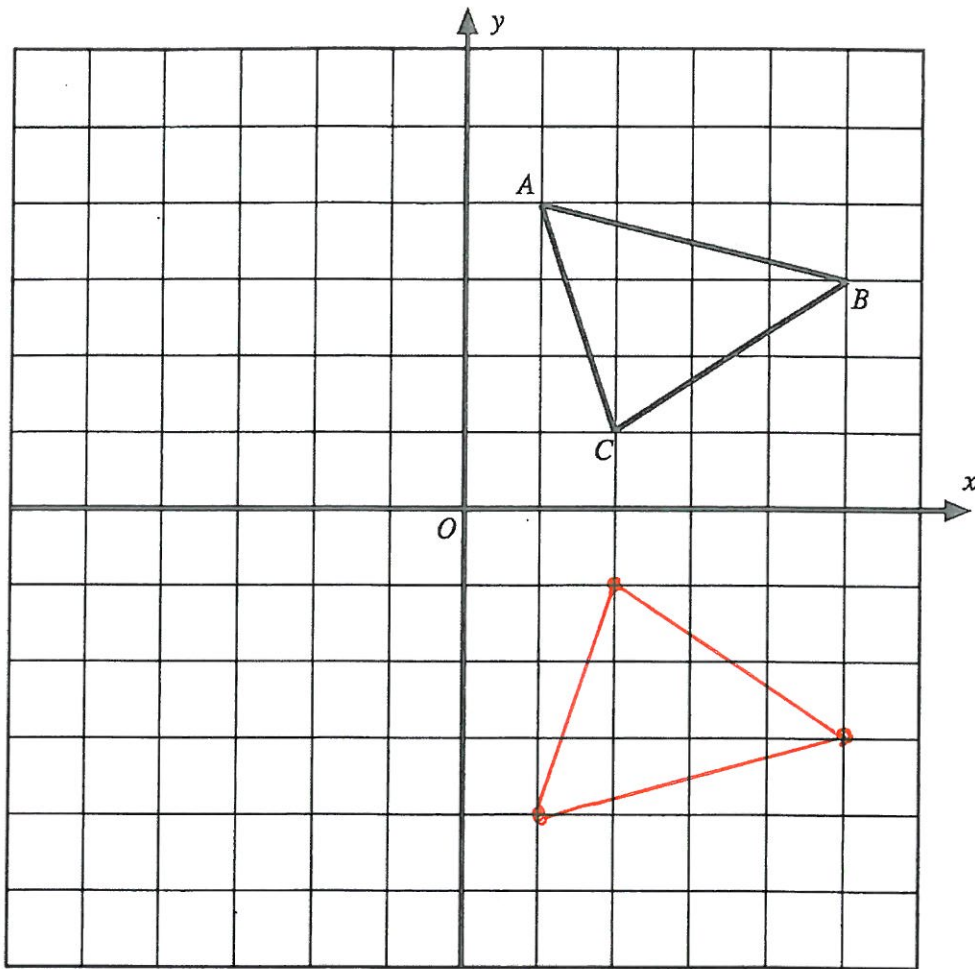
- (b) Rotate the triangle C through 90° clockwise about the point $(-1, -1)$. Label the image D.

[2]



4

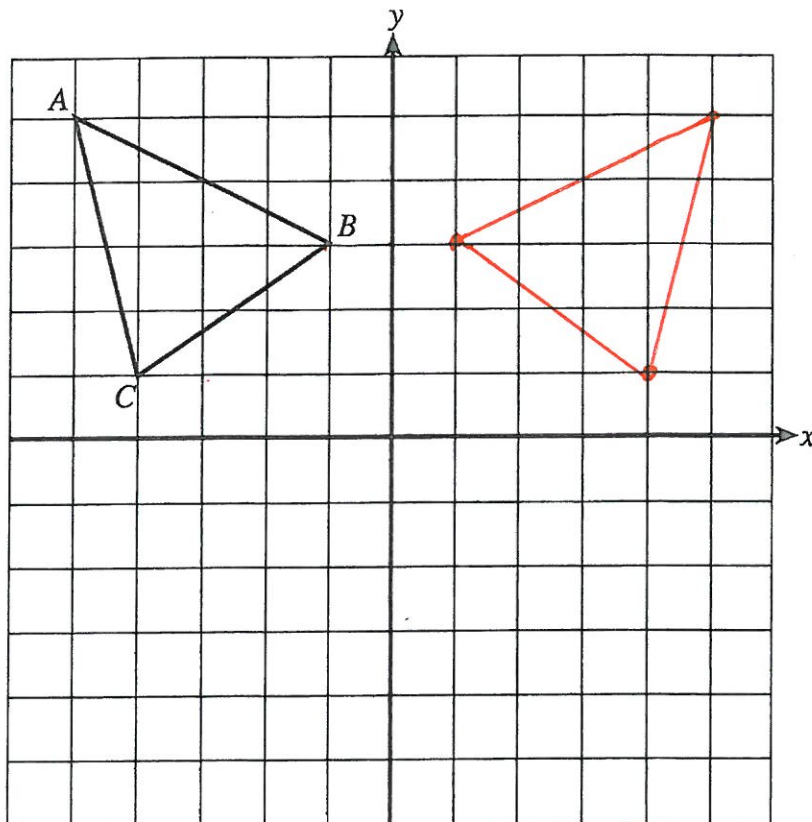
(a) Reflect the triangle ABC in the x -axis.



[1]

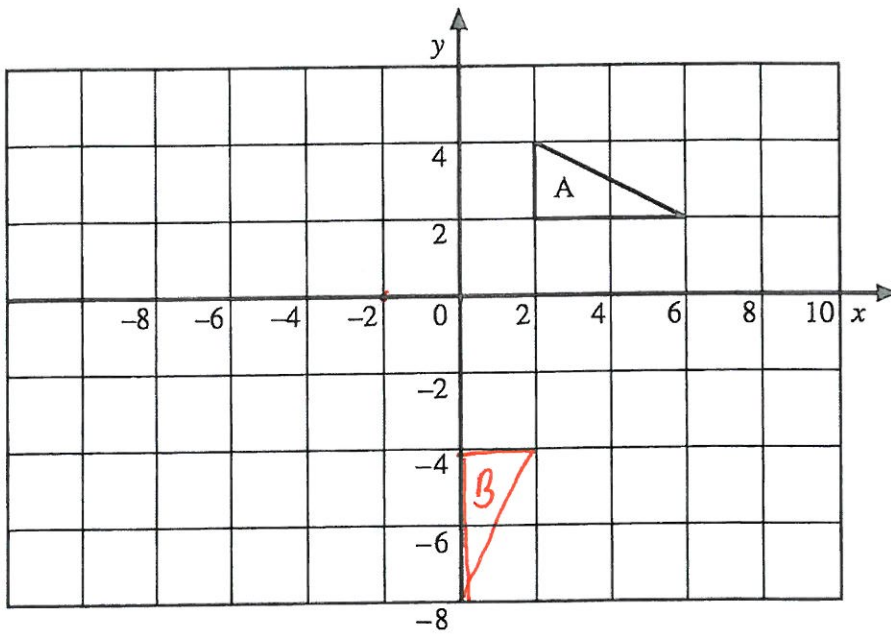
5

Reflect the triangle ABC in the y -axis.

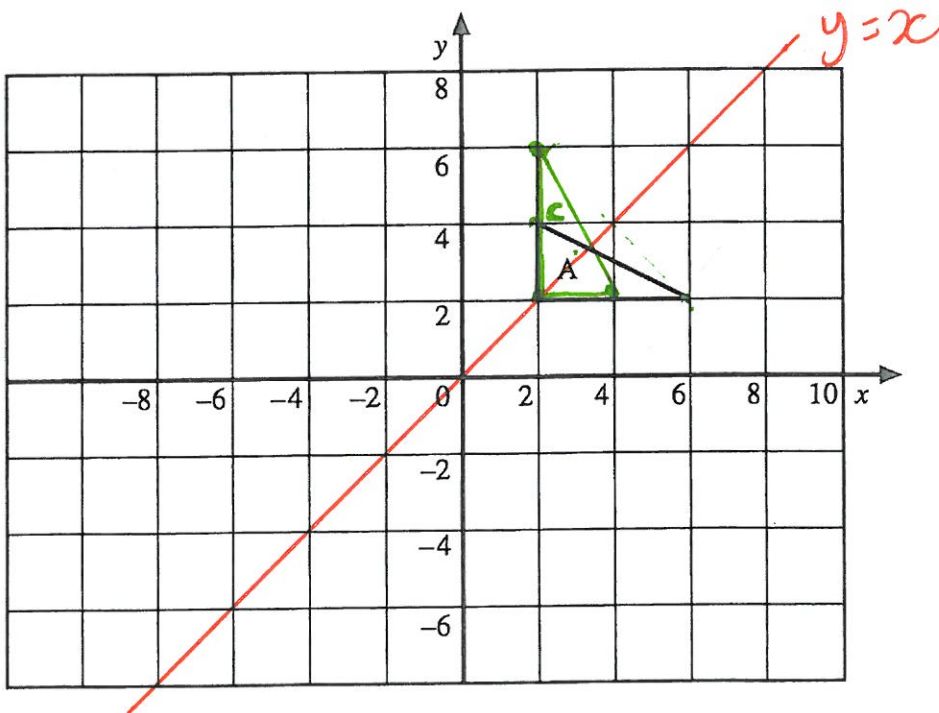


[1]

6



- (a) Rotate the shape A through 90° clockwise with centre (-2,0). Label the image B. [2]

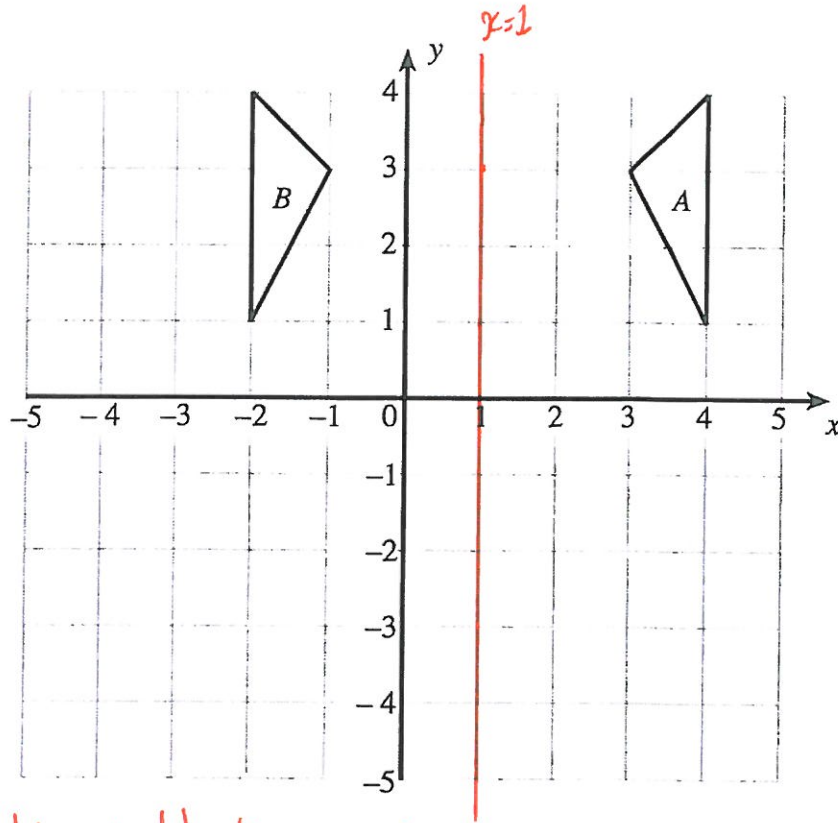


- (b) Reflect the shape A in the line y = x. Label the image C. [1]

(7)(a)

Describe fully the transformation that transforms triangle A into triangle B .

only



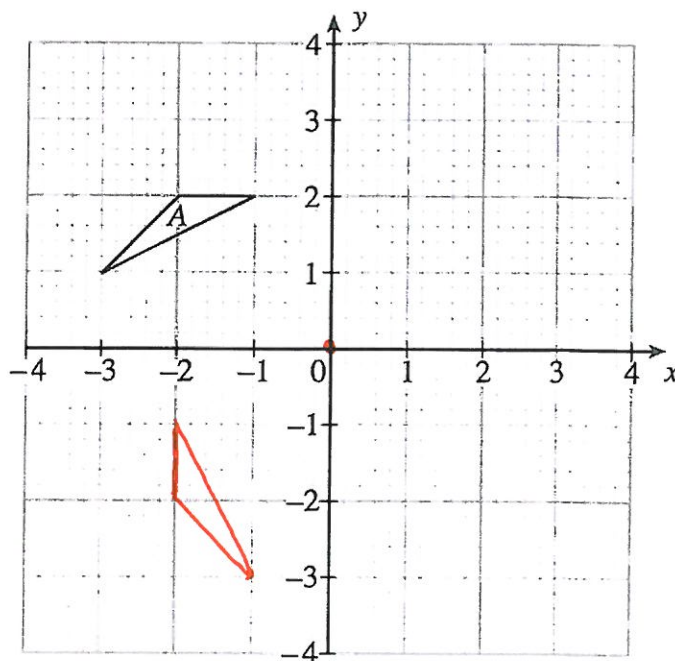
Reflection in the line $x=1$.

[2]

(b)

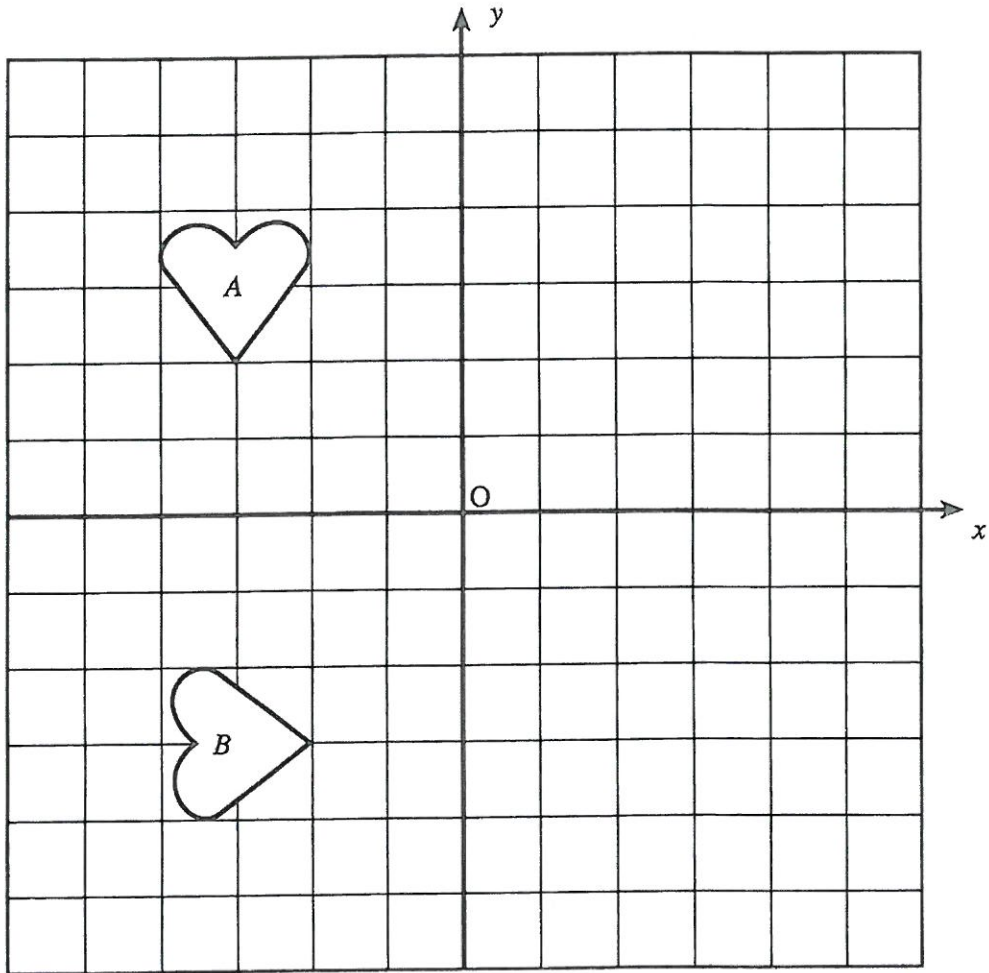
Rotate the triangle A through 90° anticlockwise about the origin.

[2]



8

Describe the single transformation that takes the shape marked A onto the shape marked B.

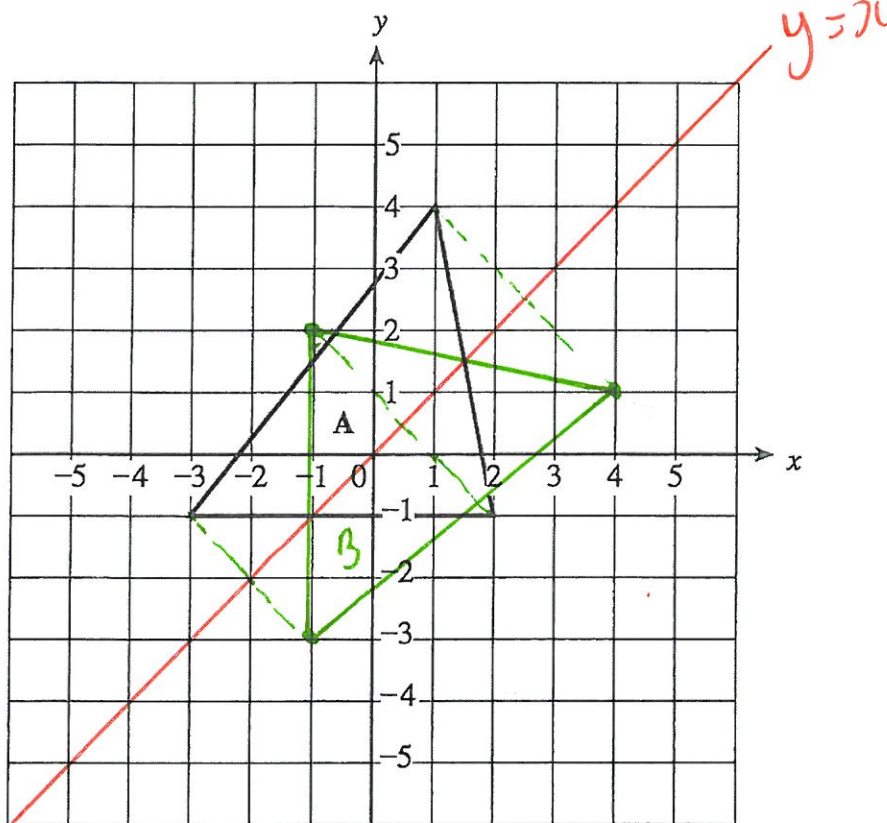


Rotation 90° anticlockwise about origin.

9

- (a) Draw the image of the triangle A after a reflection in the line $y = x$.
Label the image B.

[2]



- (b) Rotate the triangle C through 90° anticlockwise about the point $(2, 1)$.
Label the image D.

[2]

