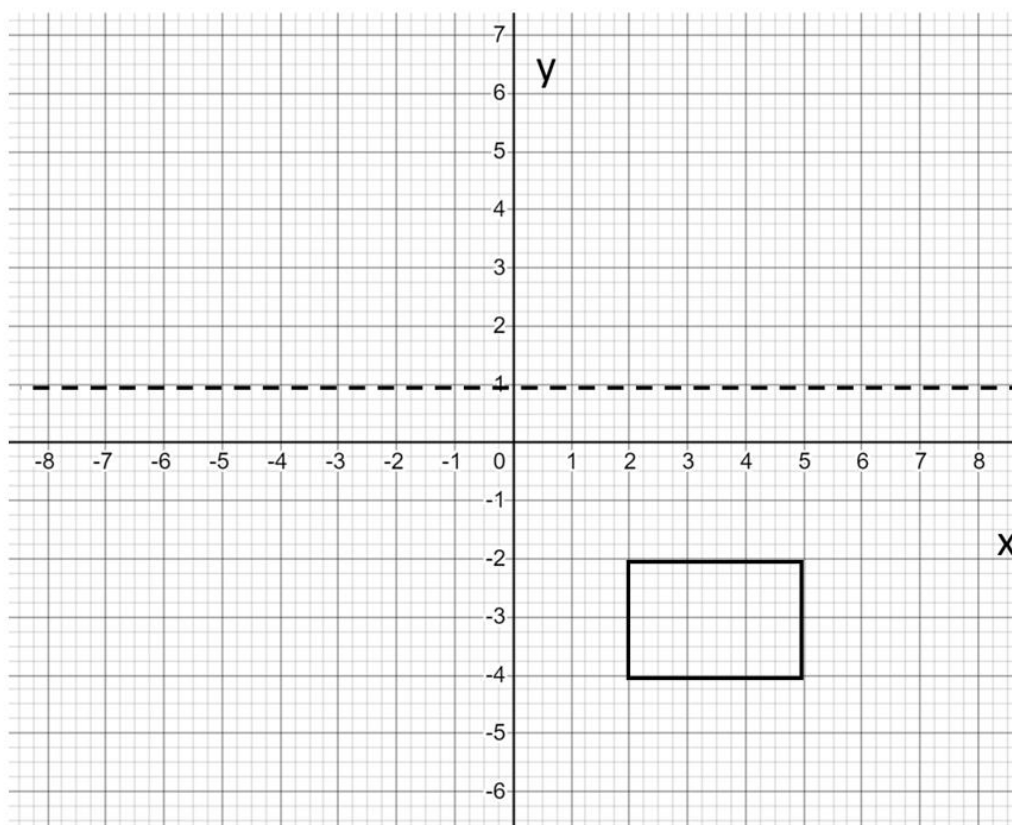




Mixed Transformations Exam Practice

Q1.



a) Reflect the shape in the dotted mirror line. Label the shape A.

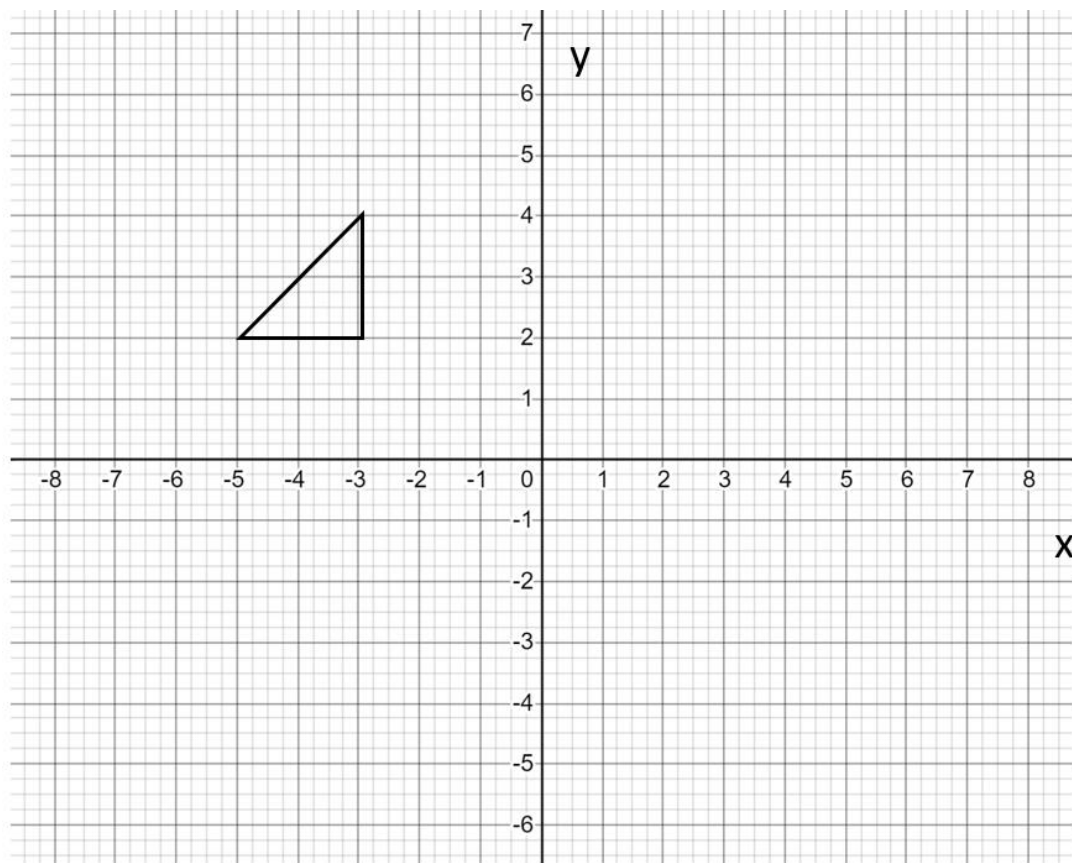
(2 marks)

b) Translate the shape A by the vector $\begin{pmatrix} -8 \\ 1 \end{pmatrix}$

(2 marks)



Q2.



- a) Enlarge the shape below by scale factor 2, centre $(-6, 4)$.
Label the shape A.

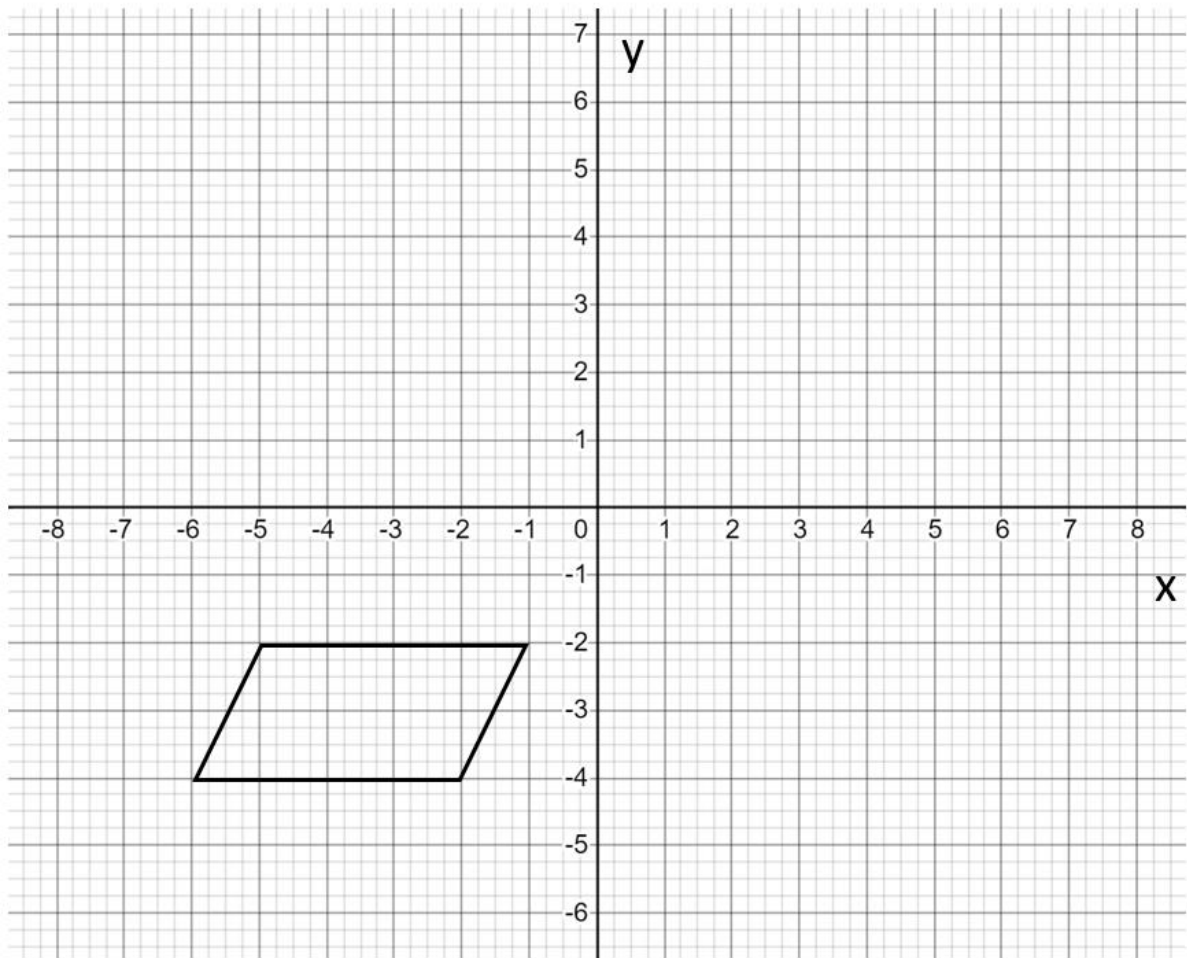
(2 marks)

- b) Rotate shape A by 90° anti-clockwise about $(2, 1)$.

(2 marks)



Q3.

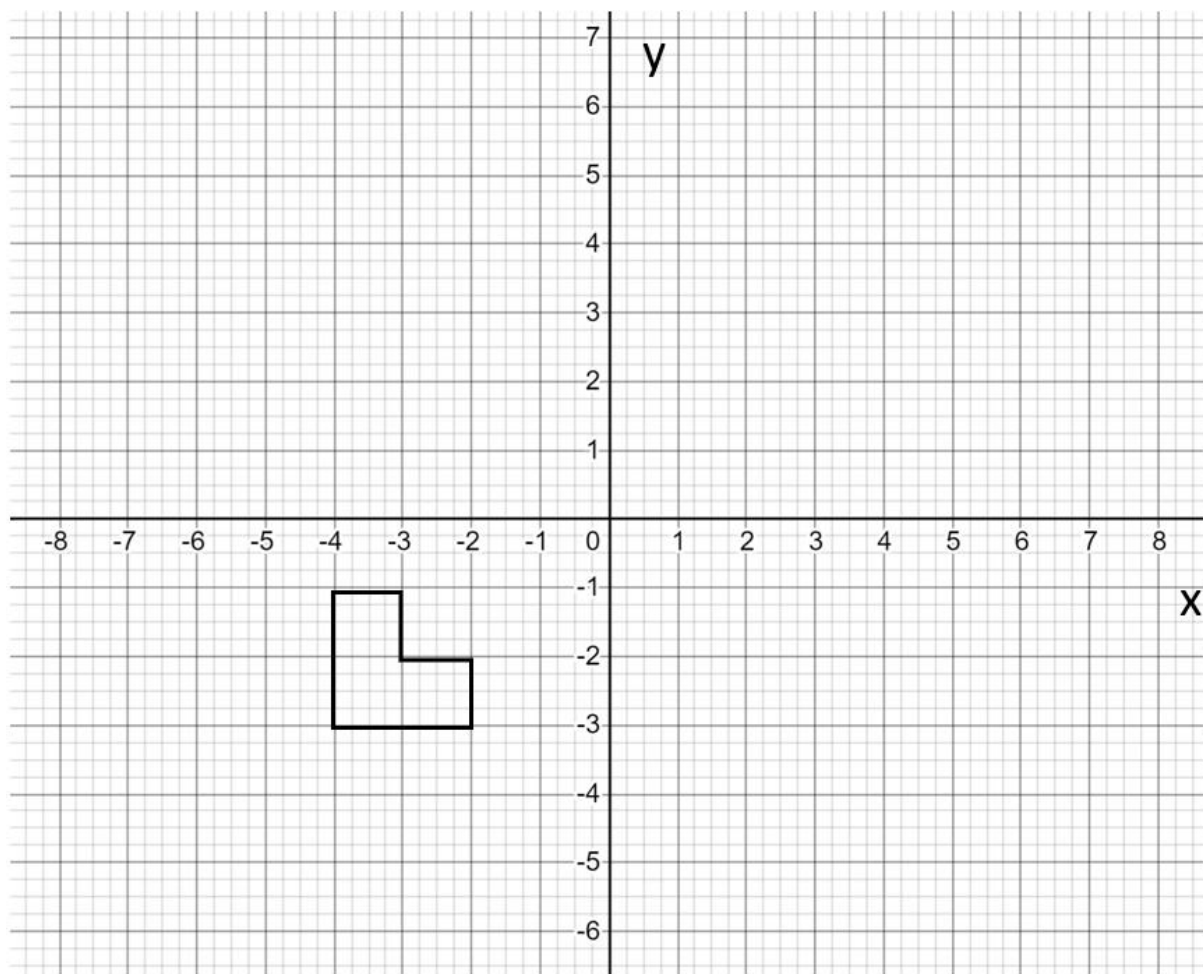


Reflect the shape in the line $y = 1$, followed by a reflection in the line $y = x$.

(3 marks)



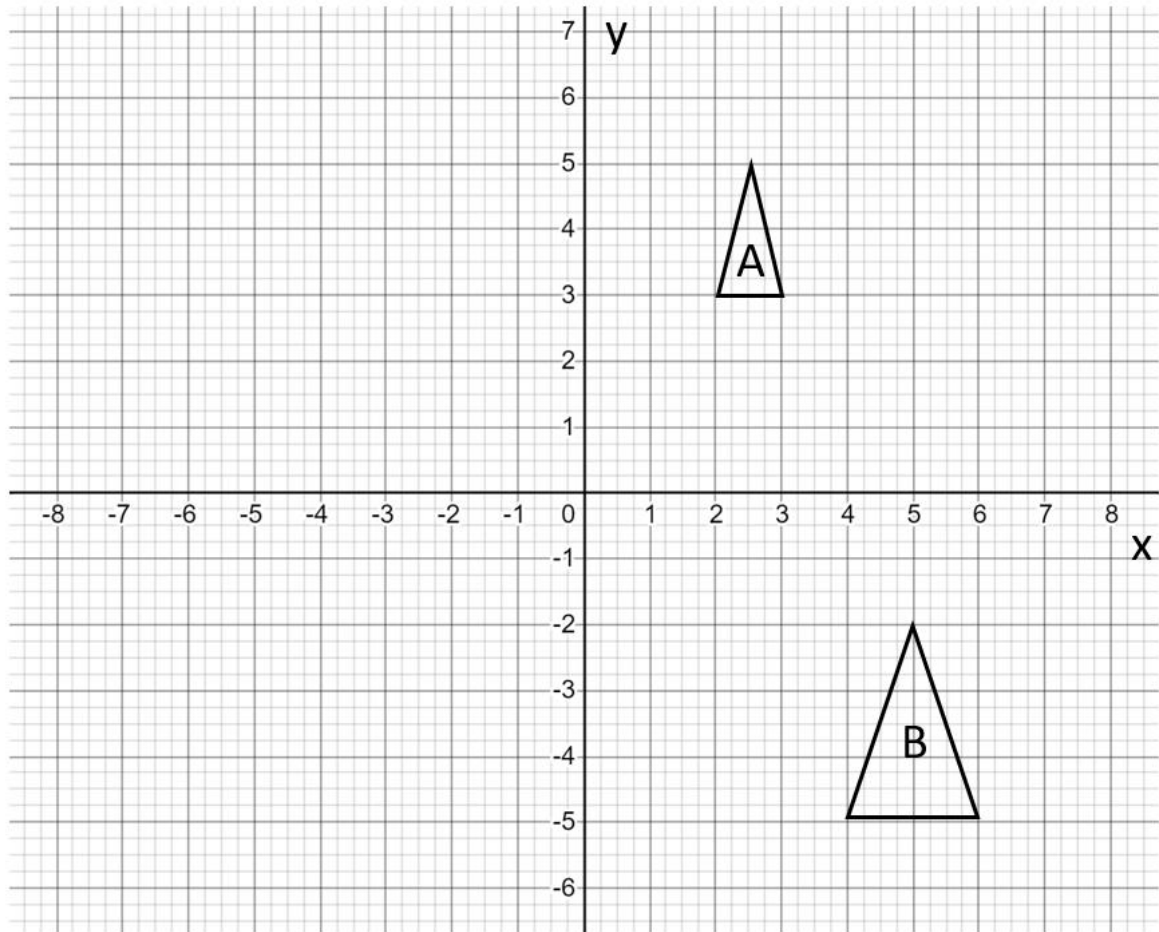
Q4.



Rotate the shape 90° clockwise about the point $(-1, 0)$, followed by a rotation of 180° about the point $(2, 1)$.

(3 marks)

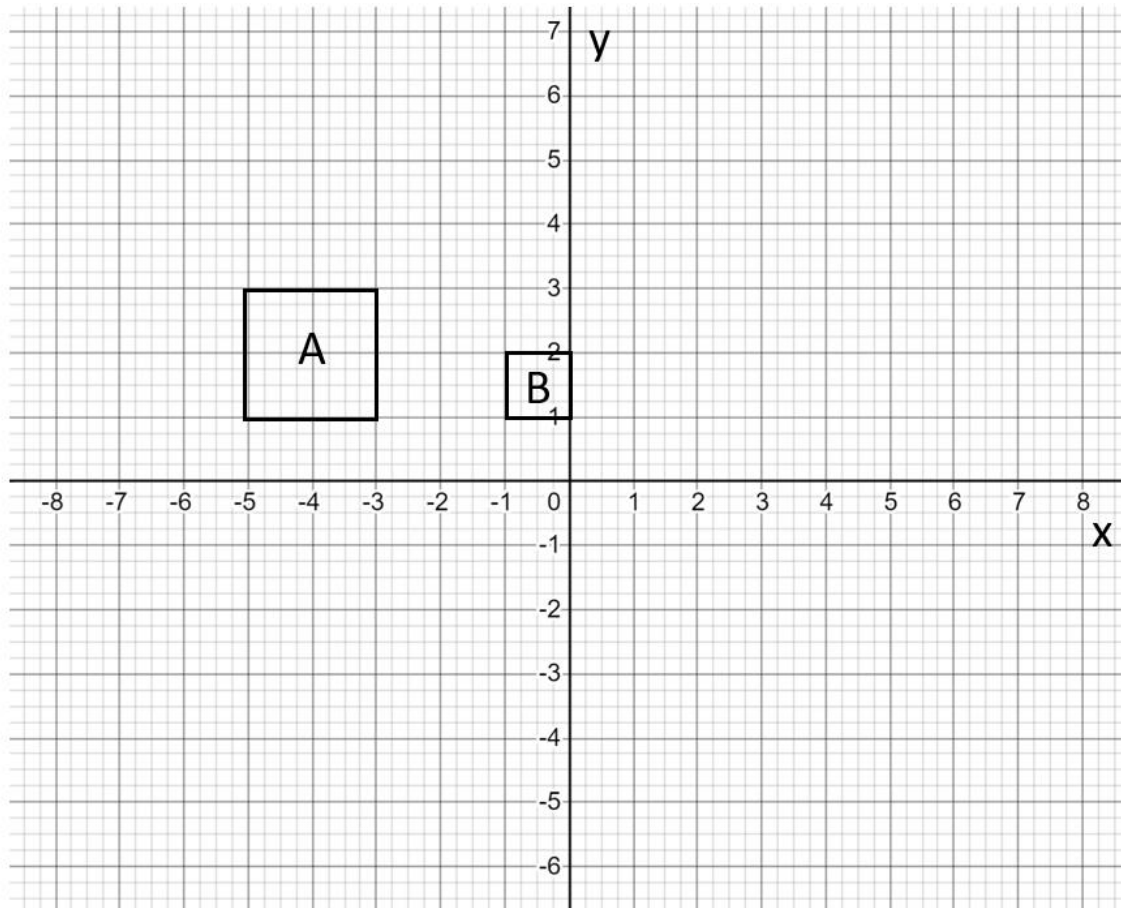
Q5.



Describe fully the transformation which takes shape B to shape A.

(4 marks)

Q6.

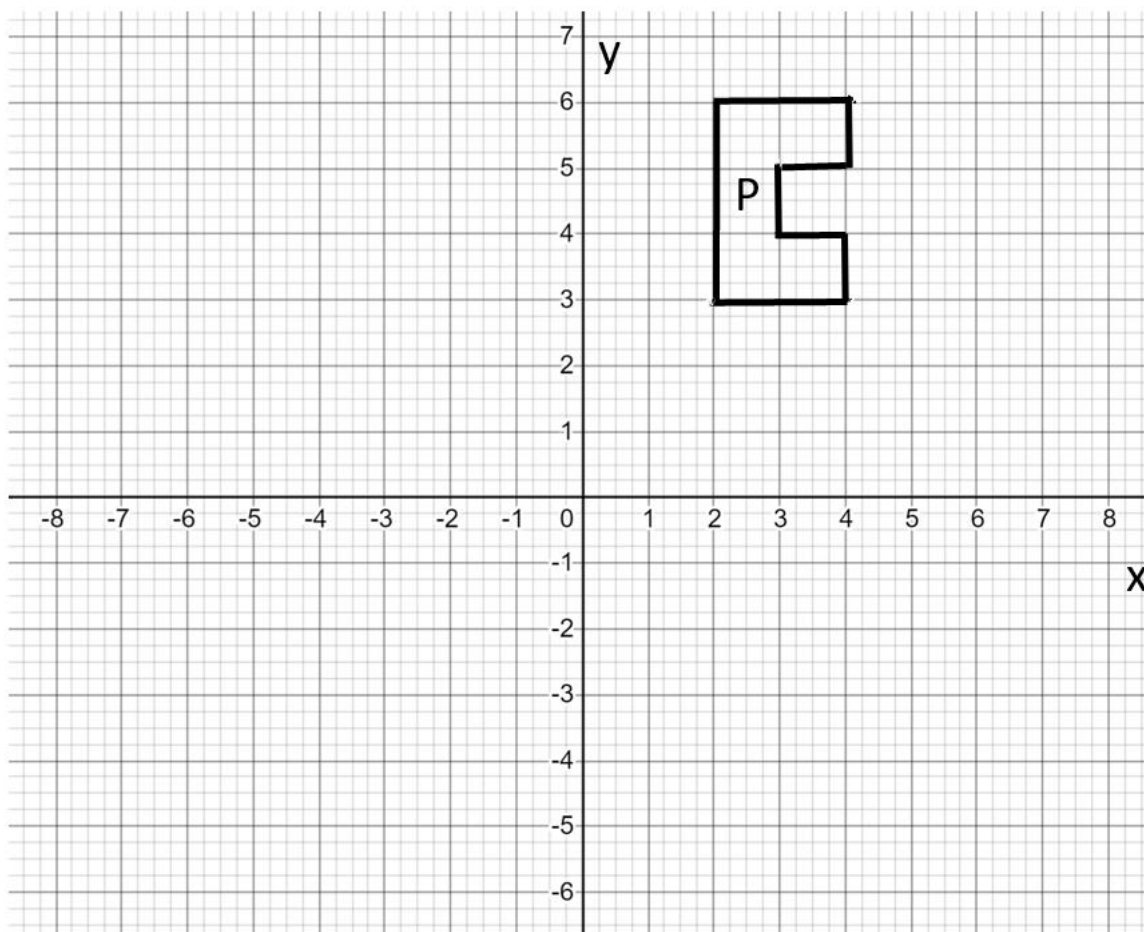


Describe fully the transformation which takes shape B to shape A.

(3 marks)



Q7.



Translate shape P by the vector $\begin{pmatrix} 3 \\ -4 \end{pmatrix}$. Label the new shape Q.

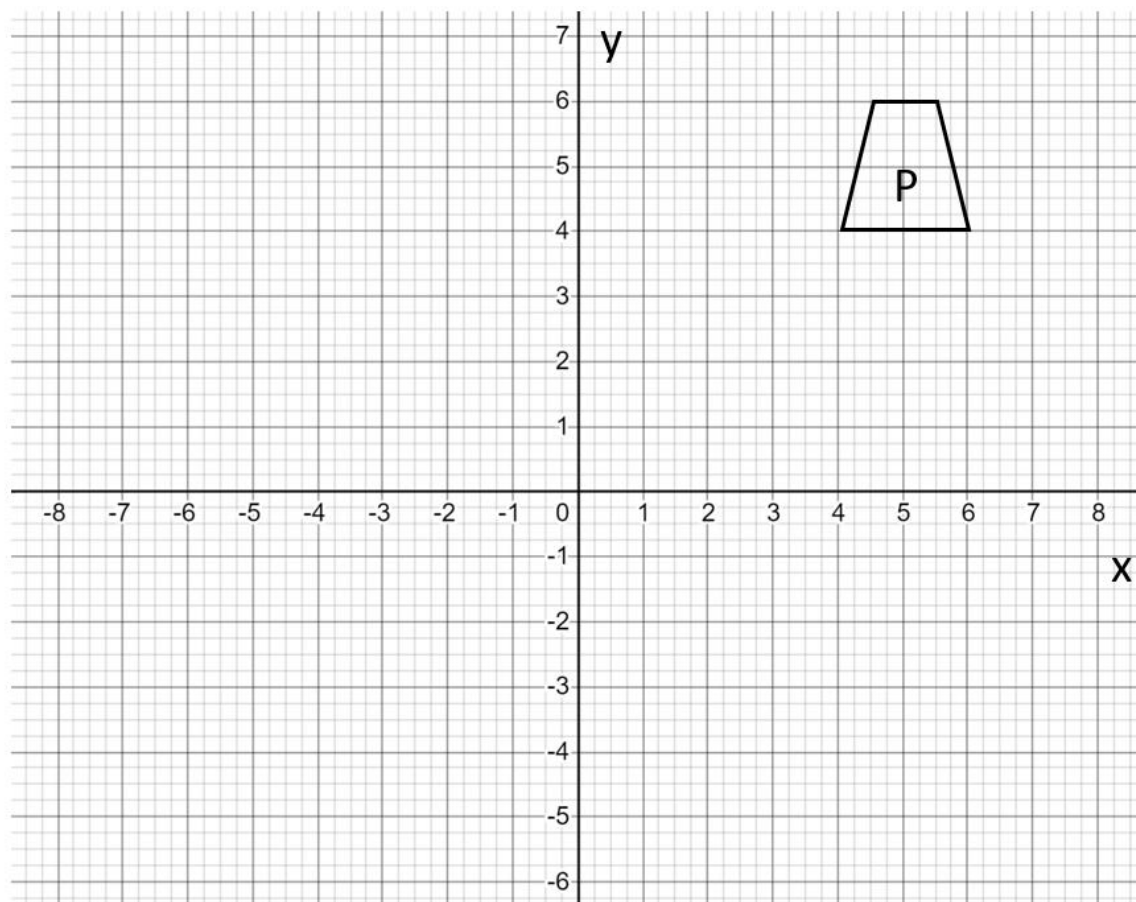
Reflect shape Q in the line $x = 1$.

Label the new shape R.

(4 marks)



Q8.



In this question, you must work entirely within the grid shown.
Enlarge shape P by scale factor 3 using a point of your choice.
Then reflect the resulting shape in a line $y = a$ where the choice of the number a is left up to you.

(3 marks)