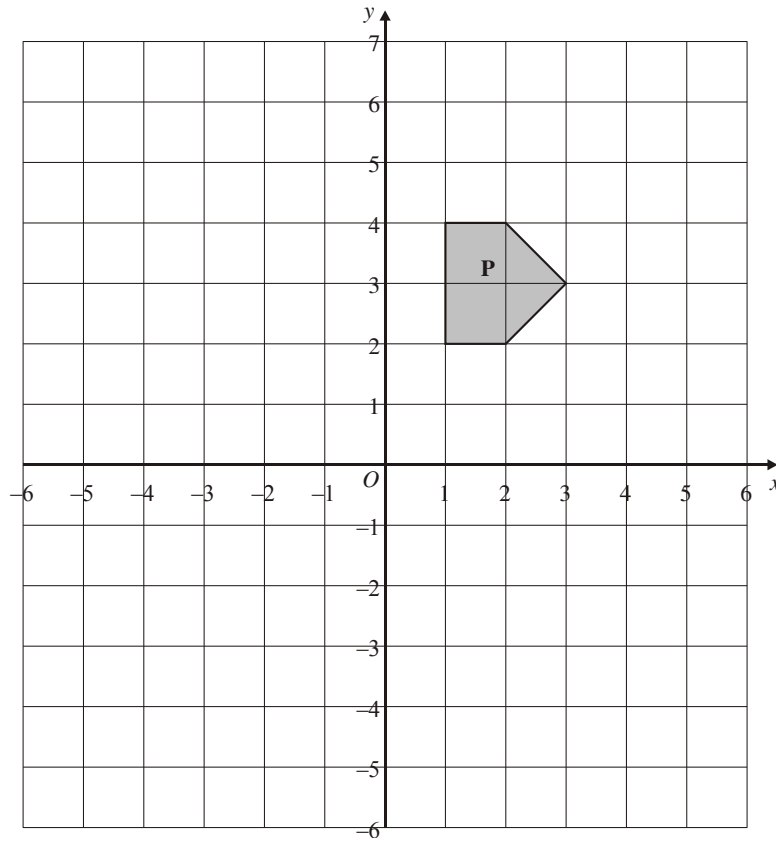


1.

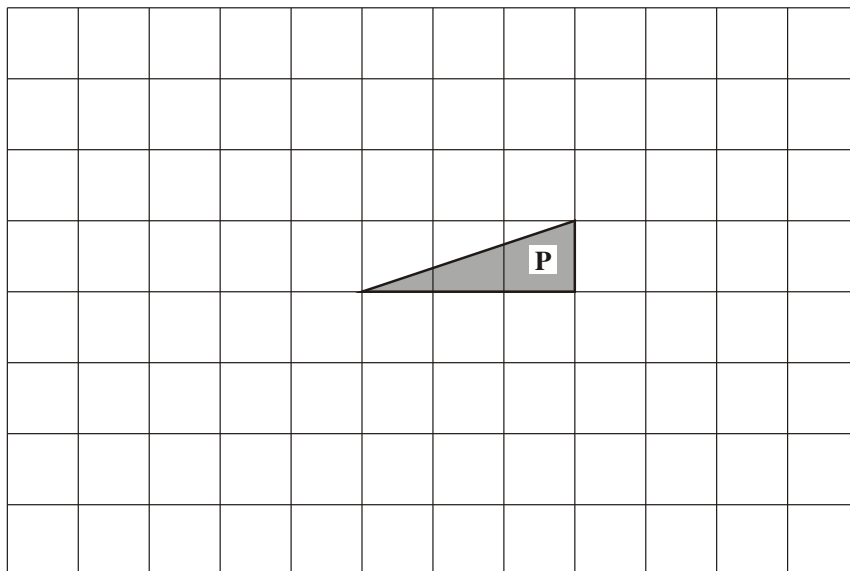


On the grid, translate the shaded shape **P** by 2 units to the right and 3 units up.

Label the new shape **R**.

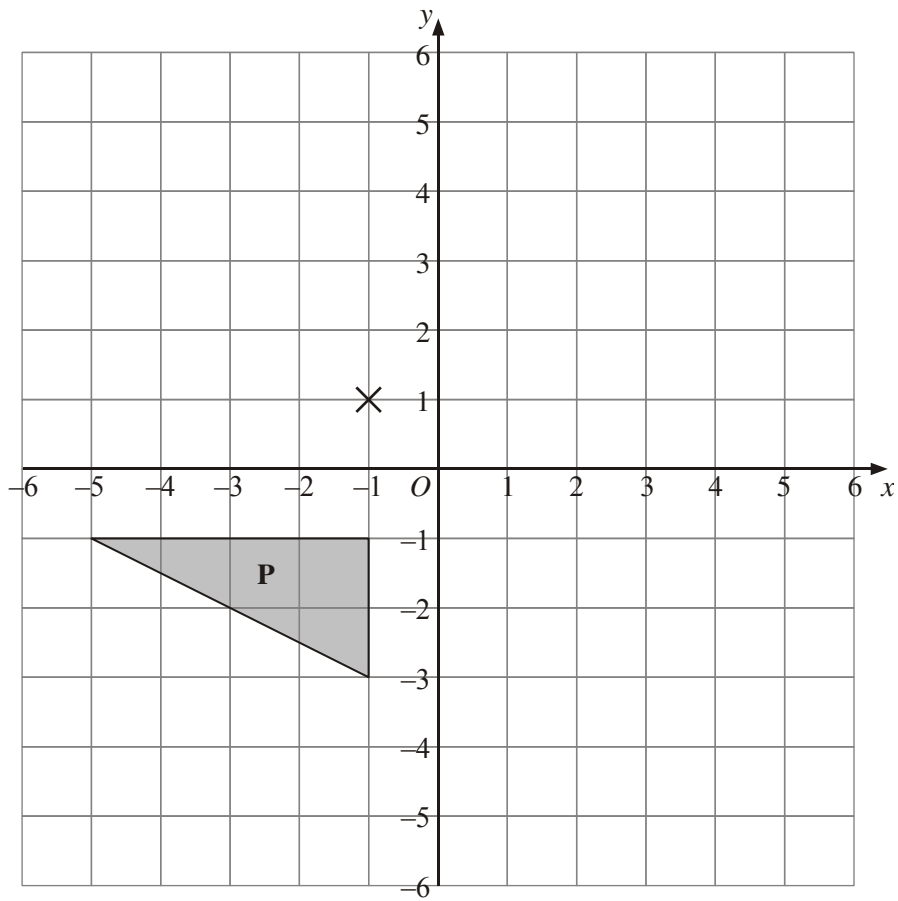
(Total 2 marks)

2. Translate shape **P** 3 squares to the left and 2 squares down.



(Total 1 mark)

3.

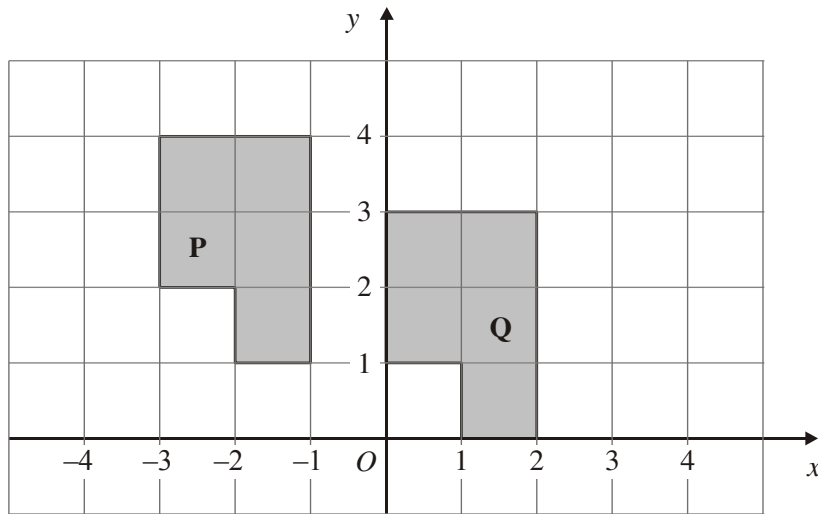


Translate triangle **P** by the vector $\begin{pmatrix} 6 \\ -1 \end{pmatrix}$.

Label the new triangle **B**.

(2)
(Total 2 marks)

4.



Describe fully the single transformation that will map shape **P** onto shape **Q**.

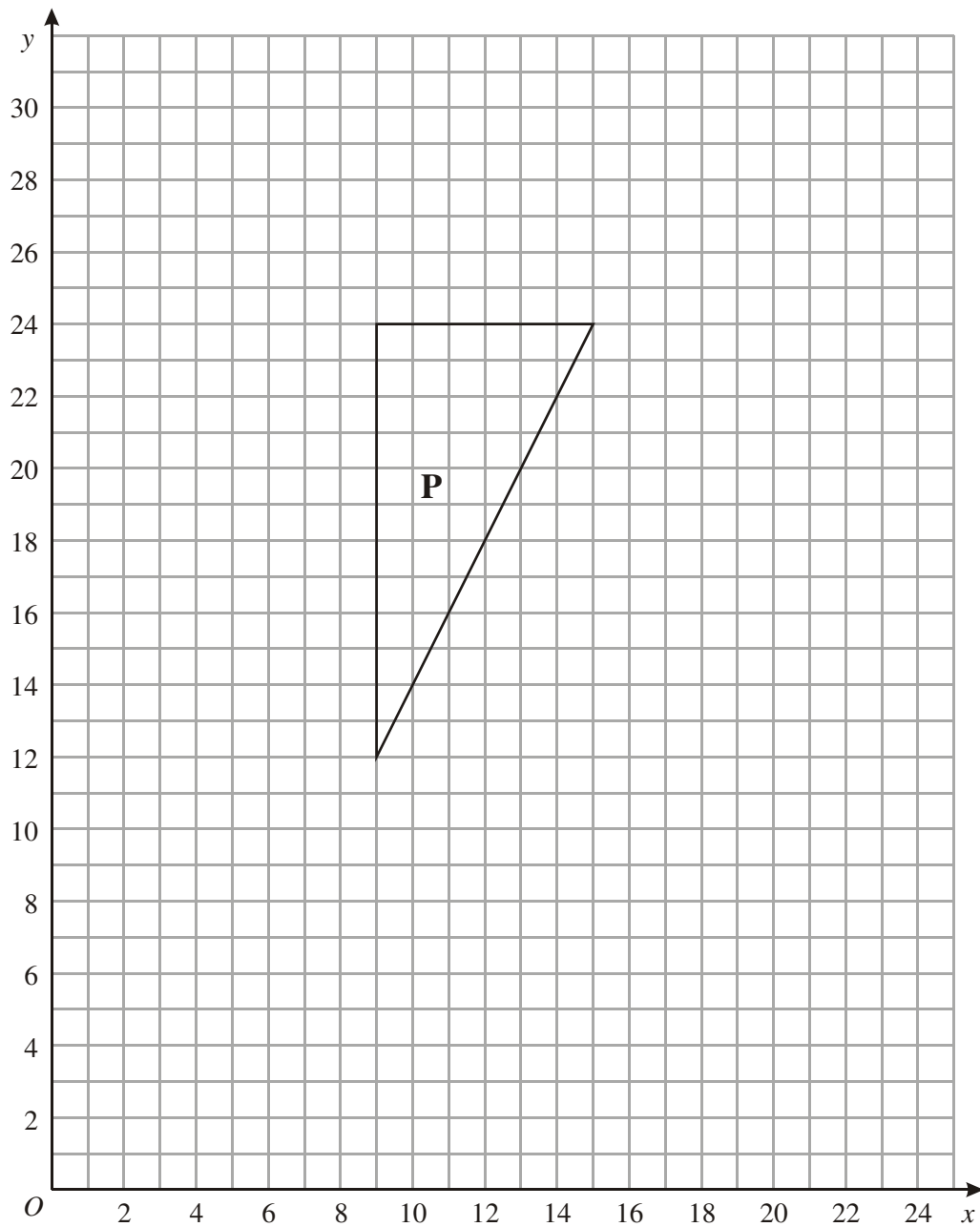
.....

.....

.....

(2)
(Total 2 marks)

5.

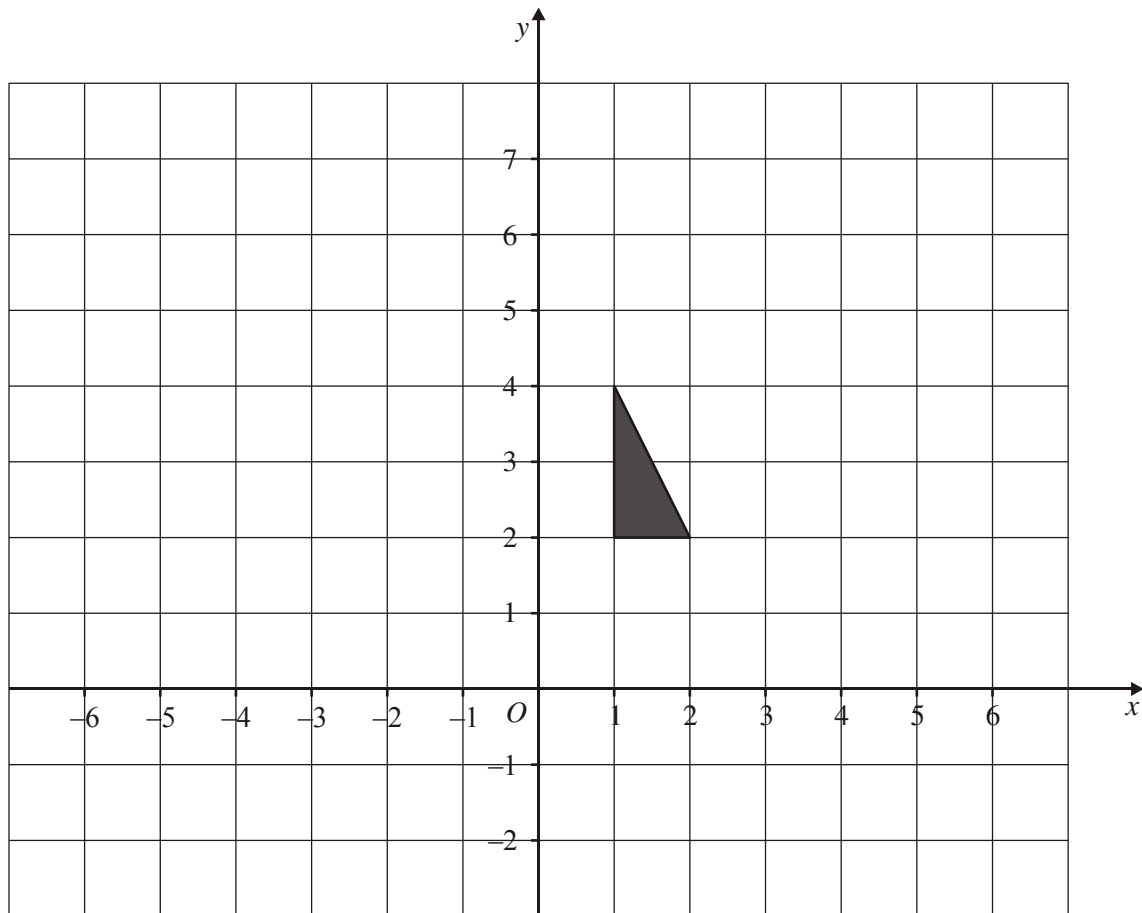


On the grid, translate triangle **P** by the vector $\begin{pmatrix} 8 \\ -3 \end{pmatrix}$

Label the new triangle **Q**.

(2)
(Total 2 marks)

6.

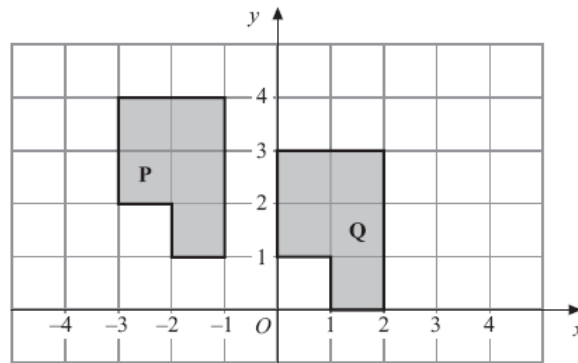


Translate the triangle by the vector

$$\begin{pmatrix} 4 \\ -3 \end{pmatrix}$$

(Total 2 mark)

7.



Describe fully the single transformation that will map shape **P** onto shape **Q**.

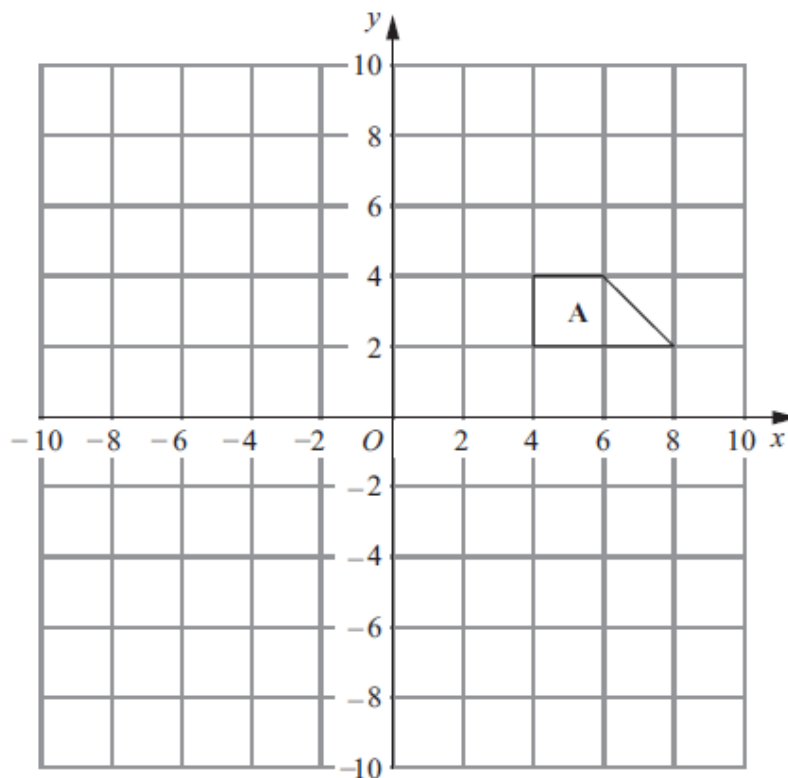
.....

.....

(2)

(Total 2 marks)

8.

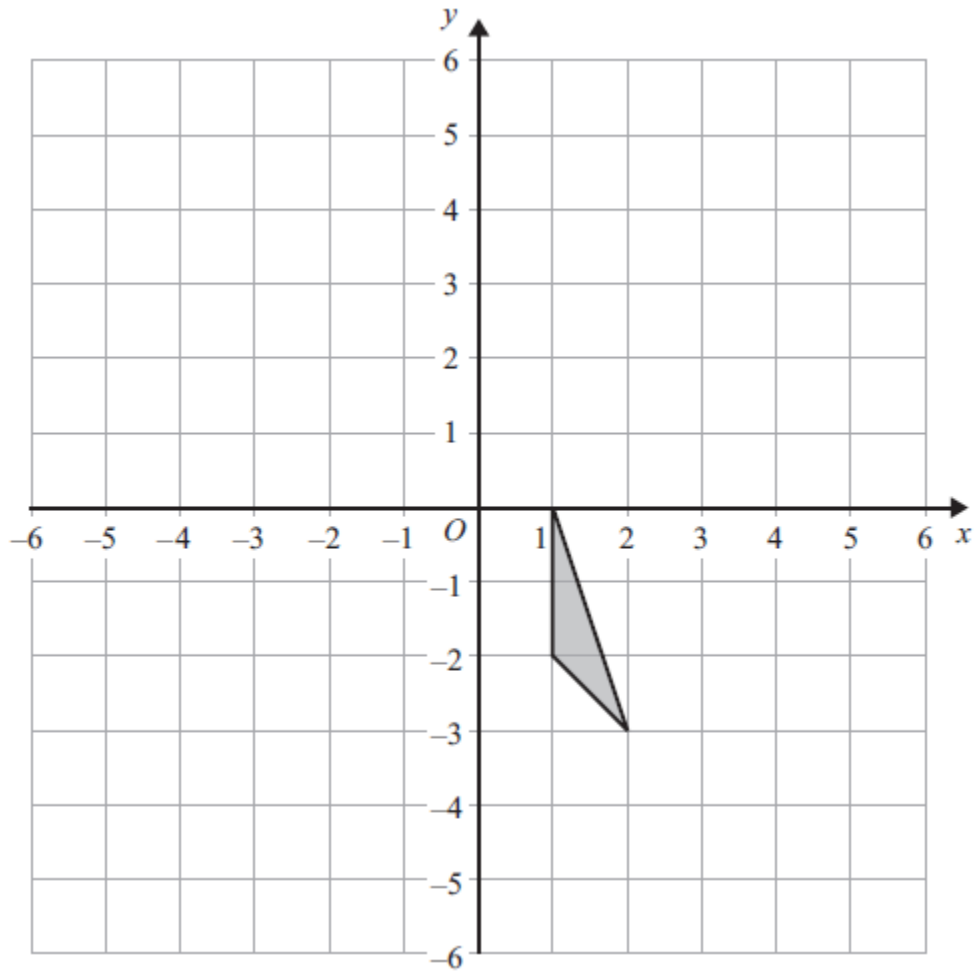


Translate shape **A** by $\begin{pmatrix} -8 \\ -2 \end{pmatrix}$.

Label the new shape **B**.

(Total 2 marks)

9.



Translate the triangle by $\begin{pmatrix} -3 \\ 2 \end{pmatrix}$

(Total 2 marks)
