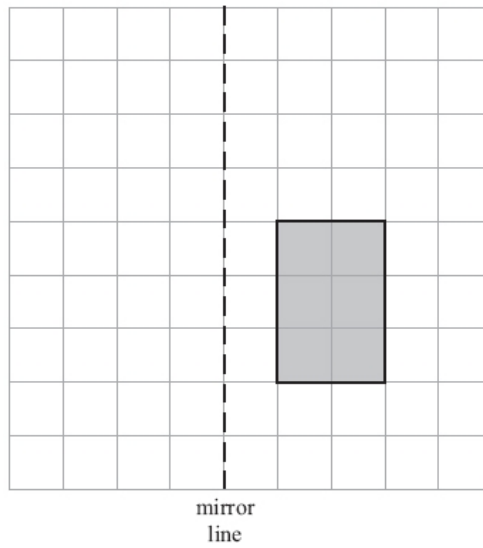## Questions

Q1.
Here is a shaded shape on a grid of centimetre squares.

mirror
line

(a) Find the perimeter of the shaded shape.
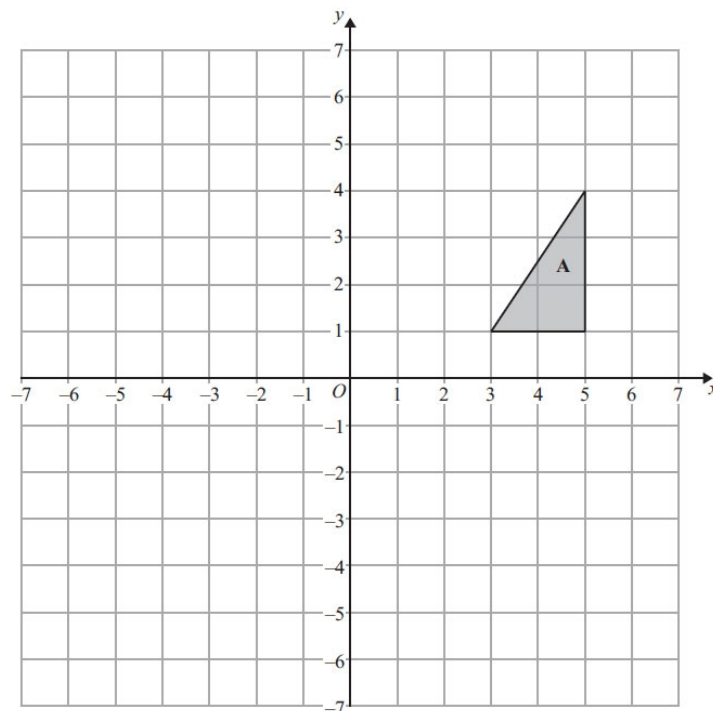
....

(b) Find the area of the shaded shape.

. . . . cm^2

(c) Reflect the shaded shape in the mirror line.

(Total for Question is 4 marks)

Q2.

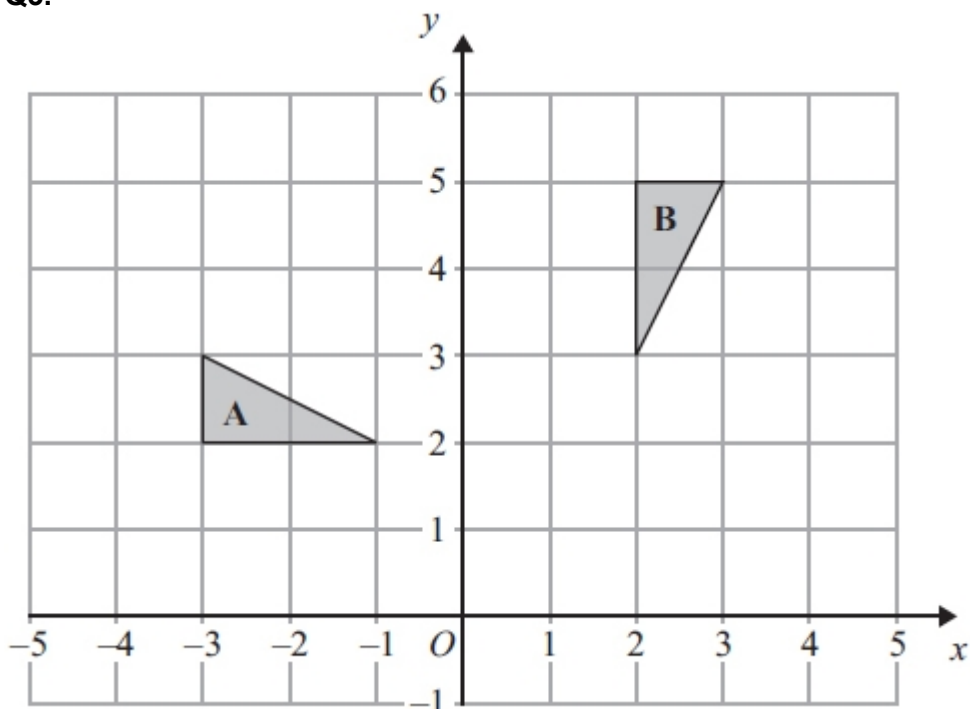Triangle **A** is reflected in the *x*-axis to give triangle **B**.
Triangle **B** is then reflected in the line *x* = 1 to give triangle **C**.

Describe fully the single transformation that maps triangle **A** onto triangle **C**.

....
....
....

Q3.

Describe fully the single transformation which maps triangle **A** onto triangle **B**.

....
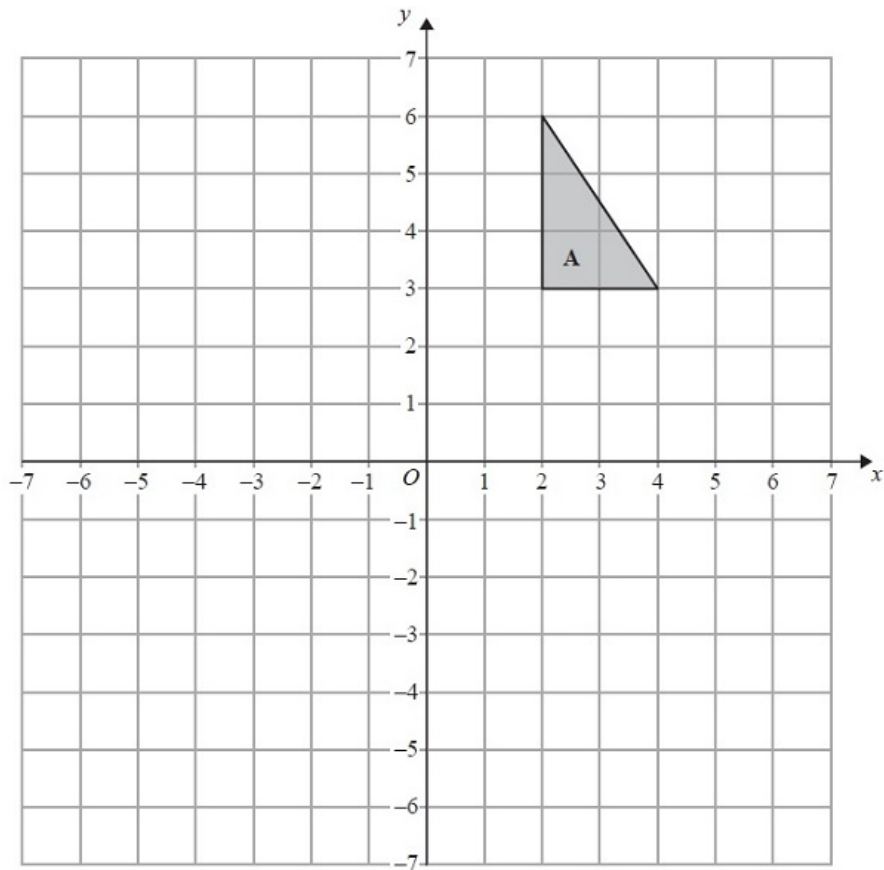.(3).

Q4.
Two shapes are shown on the grid.
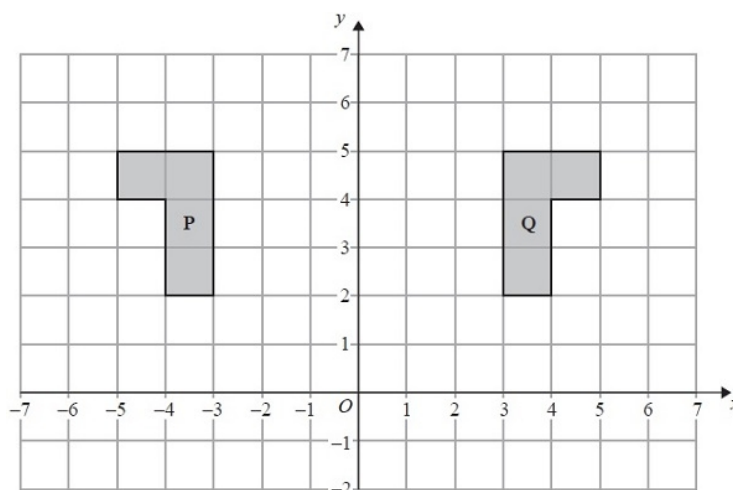
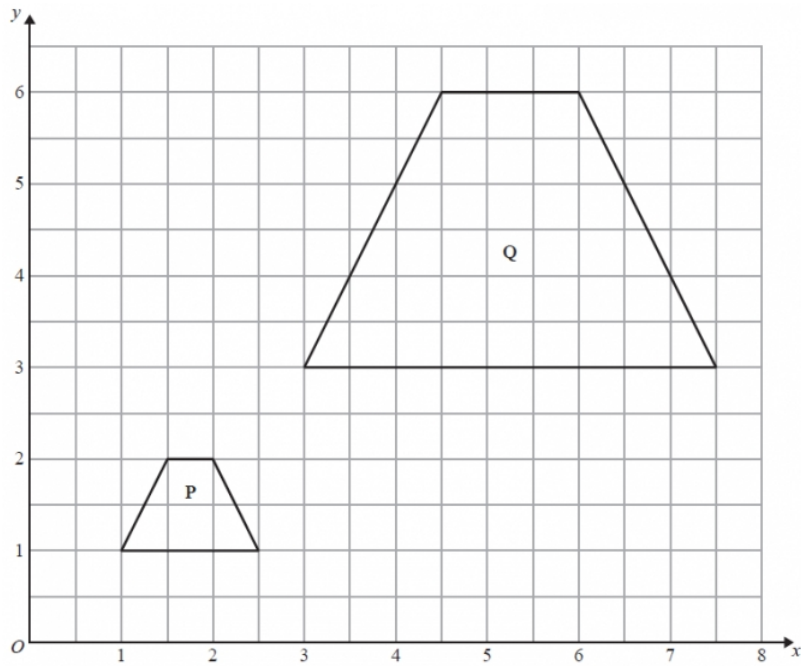(a) Describe fully the single transformation that maps shape **P** onto shape **Q**.

....
....
.... (2)

(b) Rotate triangle **A** 90° clockwise about the point (0, 2).
Label the new triangle **B**.

(2)

(Total for Question is 4 marks)

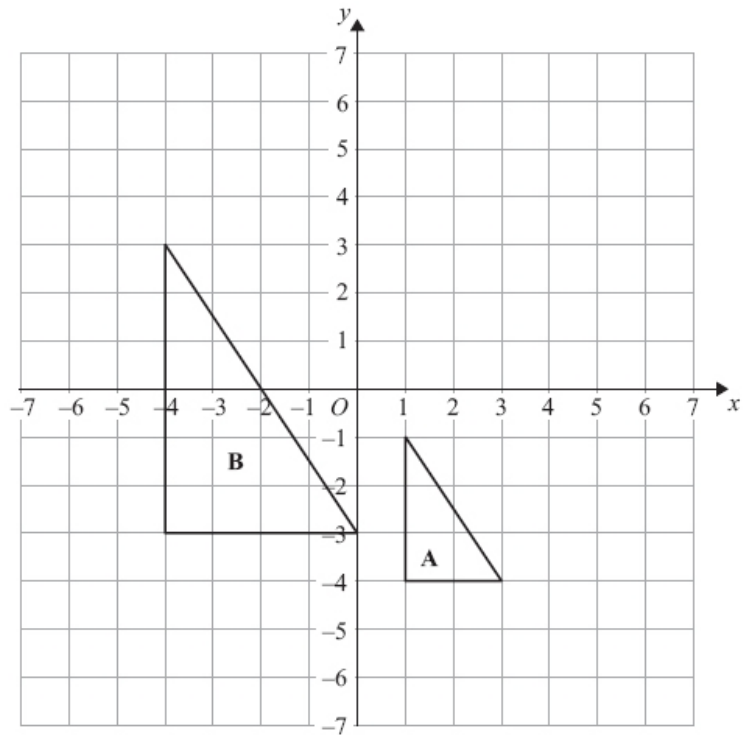**Q5.**

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

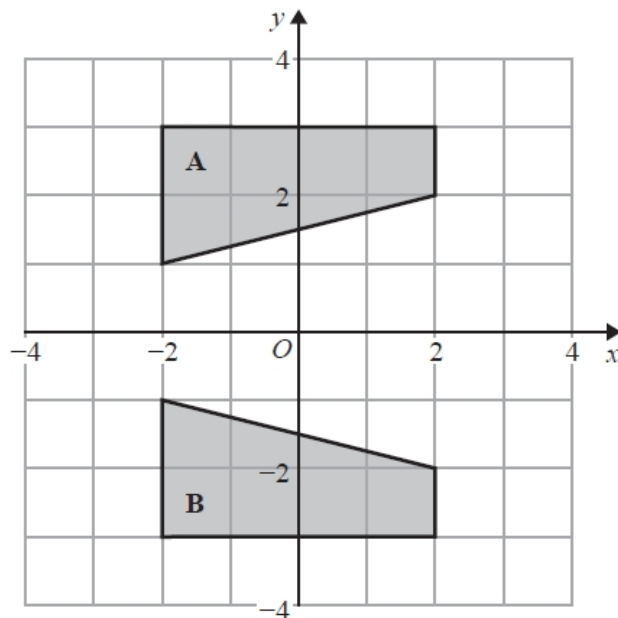...

....(3)

Q6.

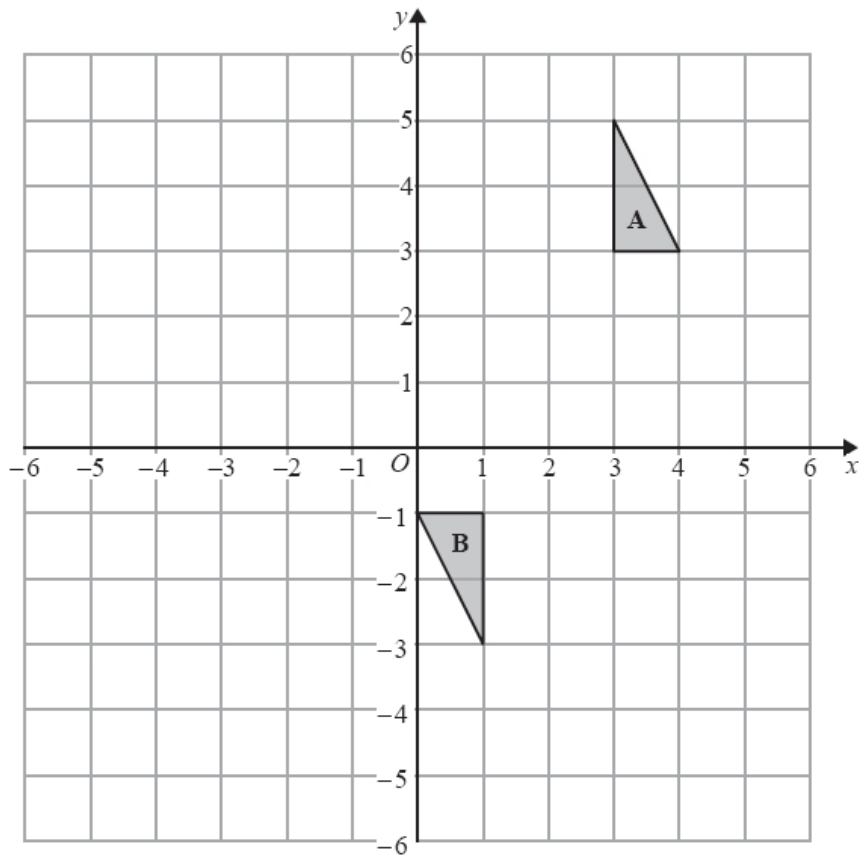Describe fully the single transformation that maps triangle **A** onto triangle **B**.

....

....

(Total for Question is 3 marks)

Q8.

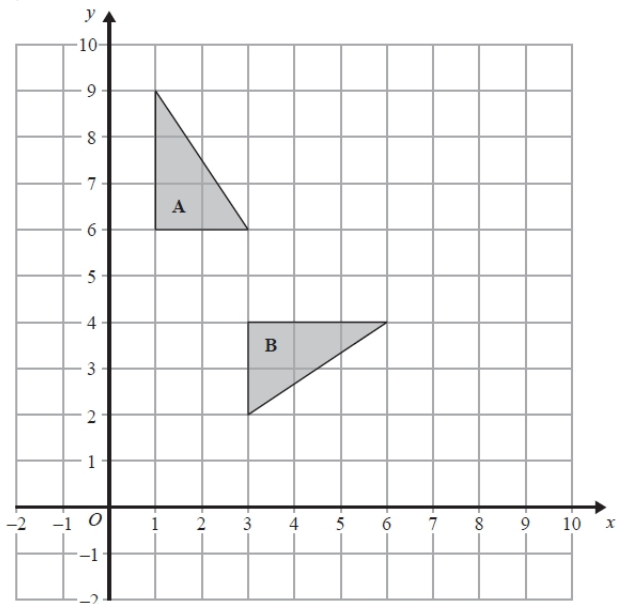Describe fully the single transformation that maps shape **A** onto shape **B**.

.... **(2 marks)**

Q9.

Describe fully the single transformation that maps triangle **A** onto triangle **B**.

....

....(3 marks)

Q10.

Describe fully the single transformation that maps triangle **A** onto triangle **B**.

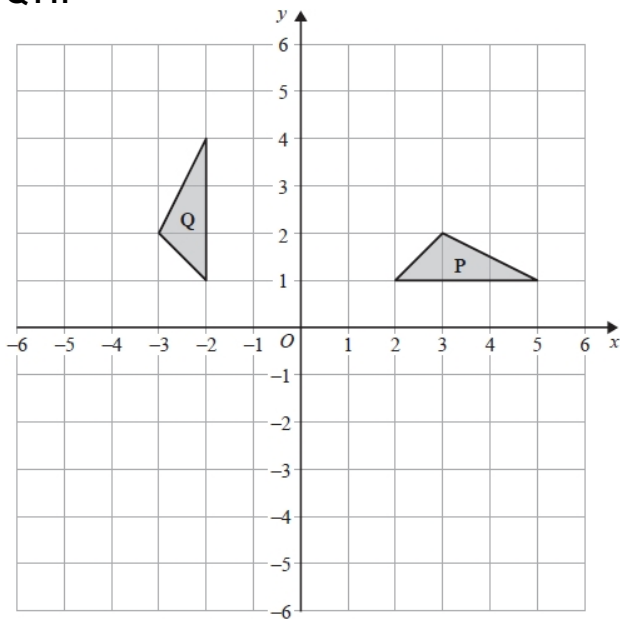...

....

.... **(3 marks)**

Q11.

a) Describe fully the single transformation that
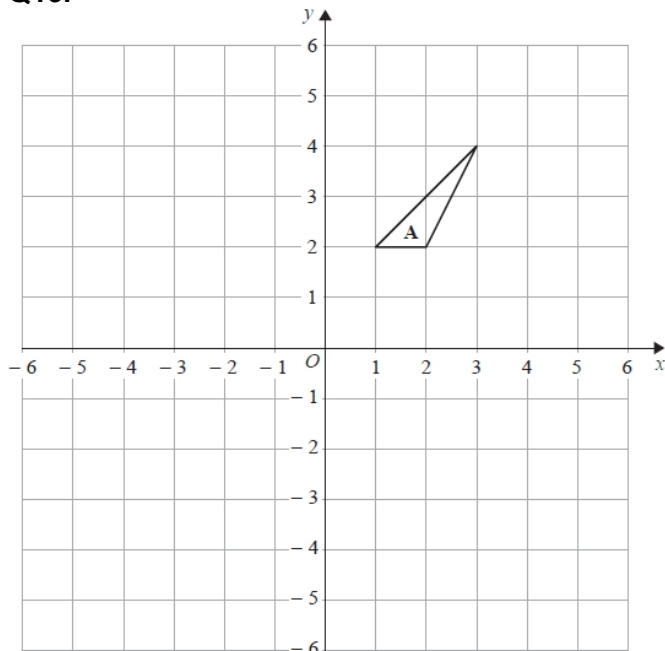   maps triangle **P** onto triangle **Q**.

....
....

....
.... **(2 marks)**

b) Describe fully the single transformation that
    maps triangle **Q** onto triangle **P**.
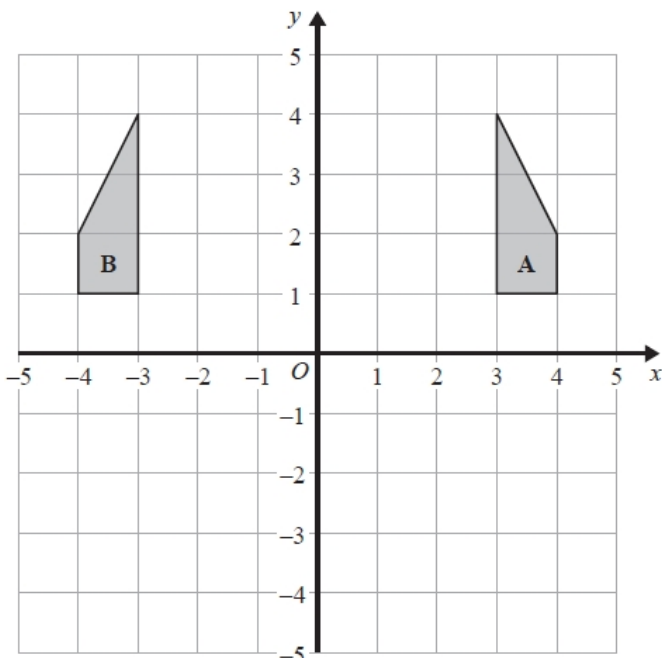
(2 marks)

Q13.

Triangle **A** is rotated 90° clockwise about the point
(0, 1) to give triangle **B**.

Triangle **B** is translated by the vector $\begin{pmatrix} -3 \\ -1 \end{pmatrix}$ to give
triangle **C**.

Describe fully the single transformation that maps
triangle **A** onto triangle **C**.

....
....

....
....

(Total for question = 3 marks)

Q14.

Describe fully the single transformation that maps
shape **A** onto shape **B**.

....
....

....
....
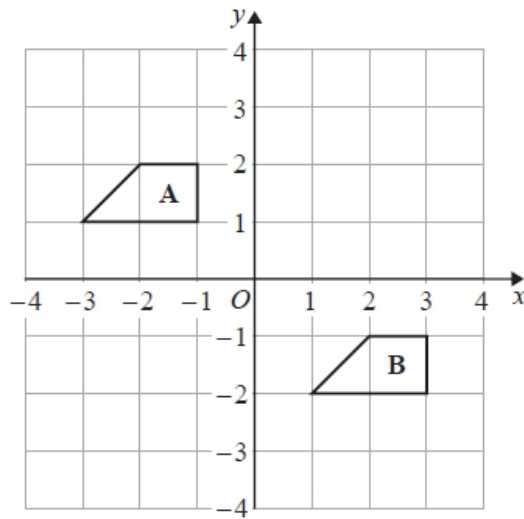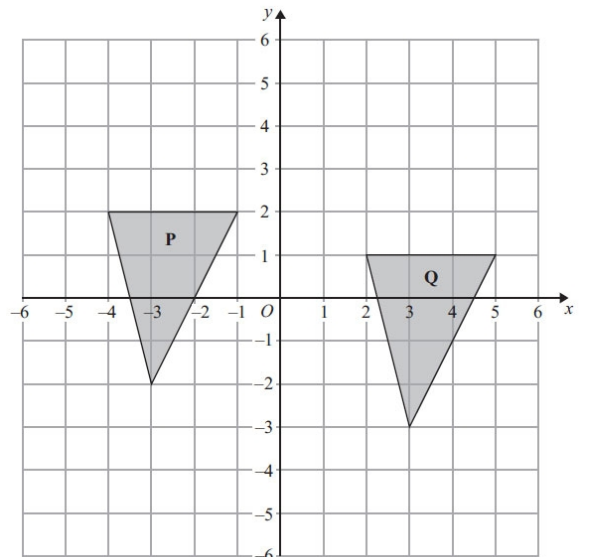
(Total for question = 2 marks)

Q15.

Shape **A** is translated by the vector $\begin{pmatrix} 4 \\ -7 \end{pmatrix}$ to make Shape **B**.

Shape **B** is then translated by the vector $\begin{pmatrix} -3 \\ -2 \end{pmatrix}$ to make Shape **C**.

Describe the single transformation that maps Shape **A** onto Shape **C**.

.... **(2 marks)**

Q16.

Describe the single transformation that maps shape **A** onto shape **B**.

....

.... **(2 marks)**

Q17.

Describe fully the single transformation that maps triangle **P** onto triangle **Q**.

....

....

....

....

(Total for Question is 2 marks)

Q18
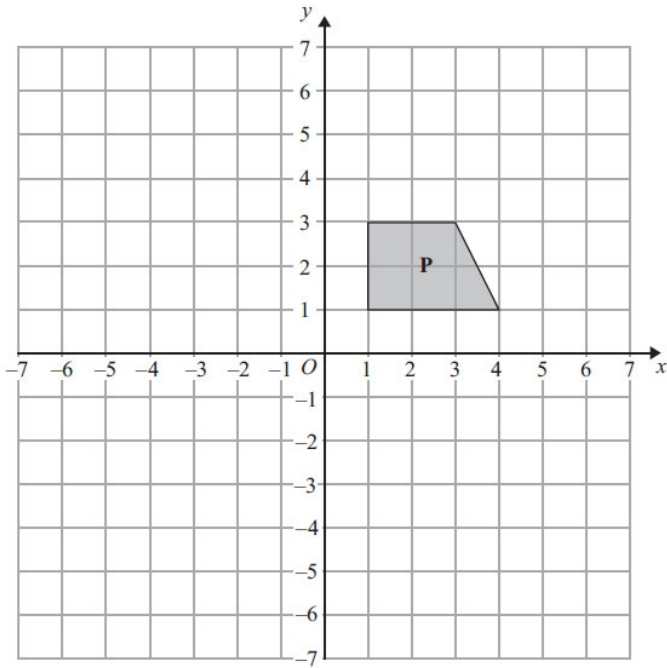
Shape **P** is reflected in the line $x = -1$ to give shape **Q**.
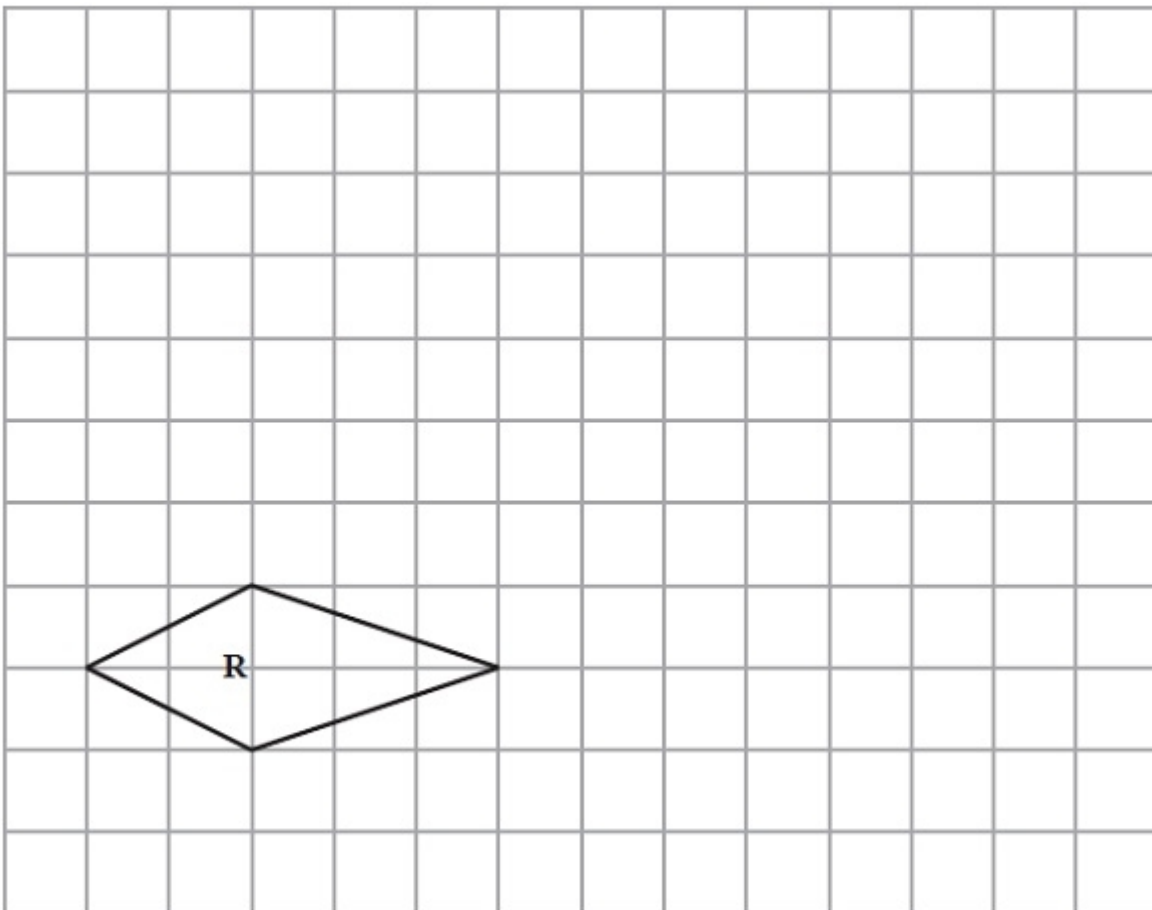
Shape **Q** is reflected in the line $y = 0$ to give shape **R**.

Describe fully the **single** transformation that maps shape **P** onto shape **R**.

....

....

....

....

(Total for Question is 3 marks)

Q19.

On the grid, draw an enlargement of shape **R** with a scale factor of 2
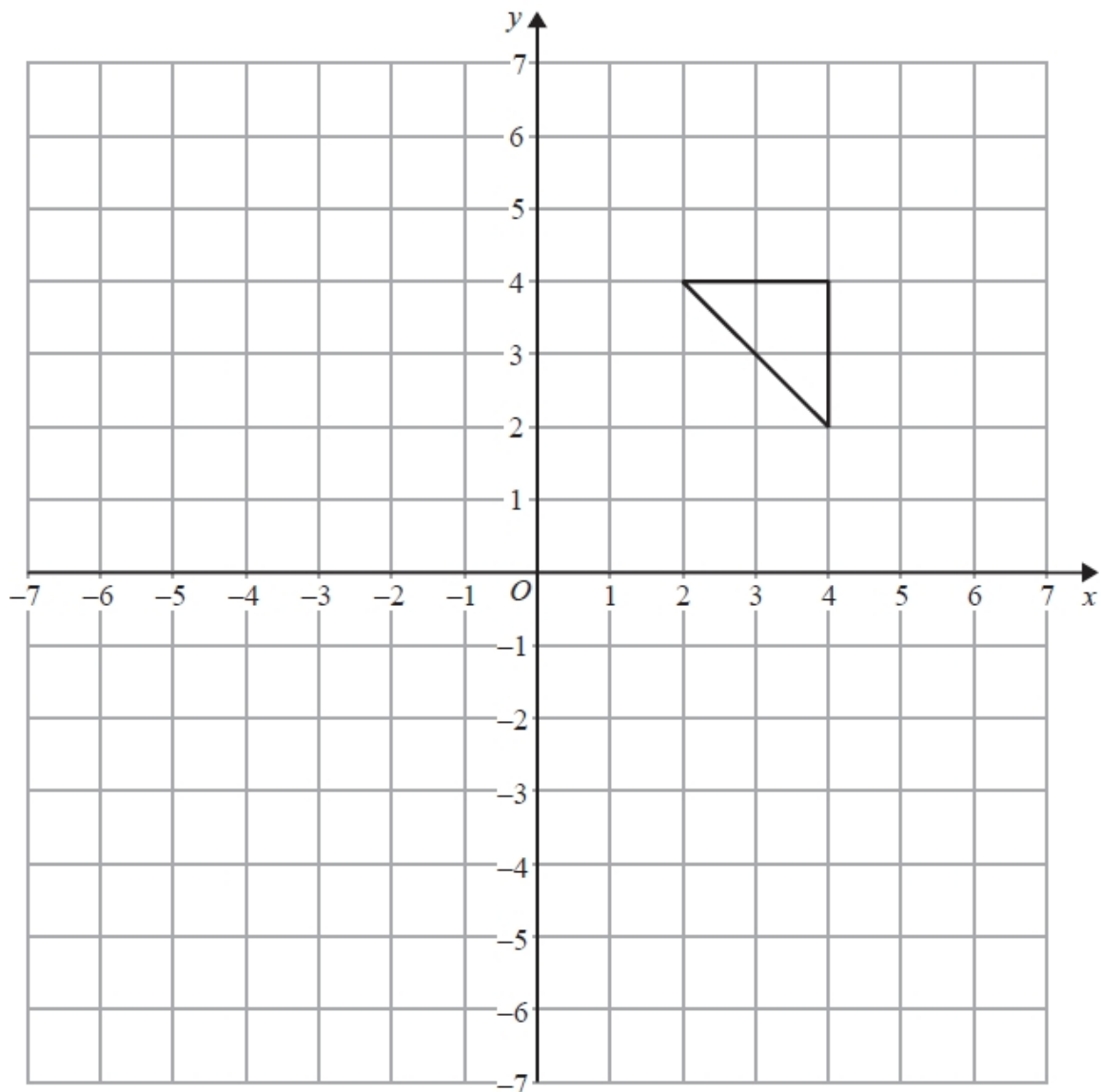
(Total for Question is 2 marks)

Q20.
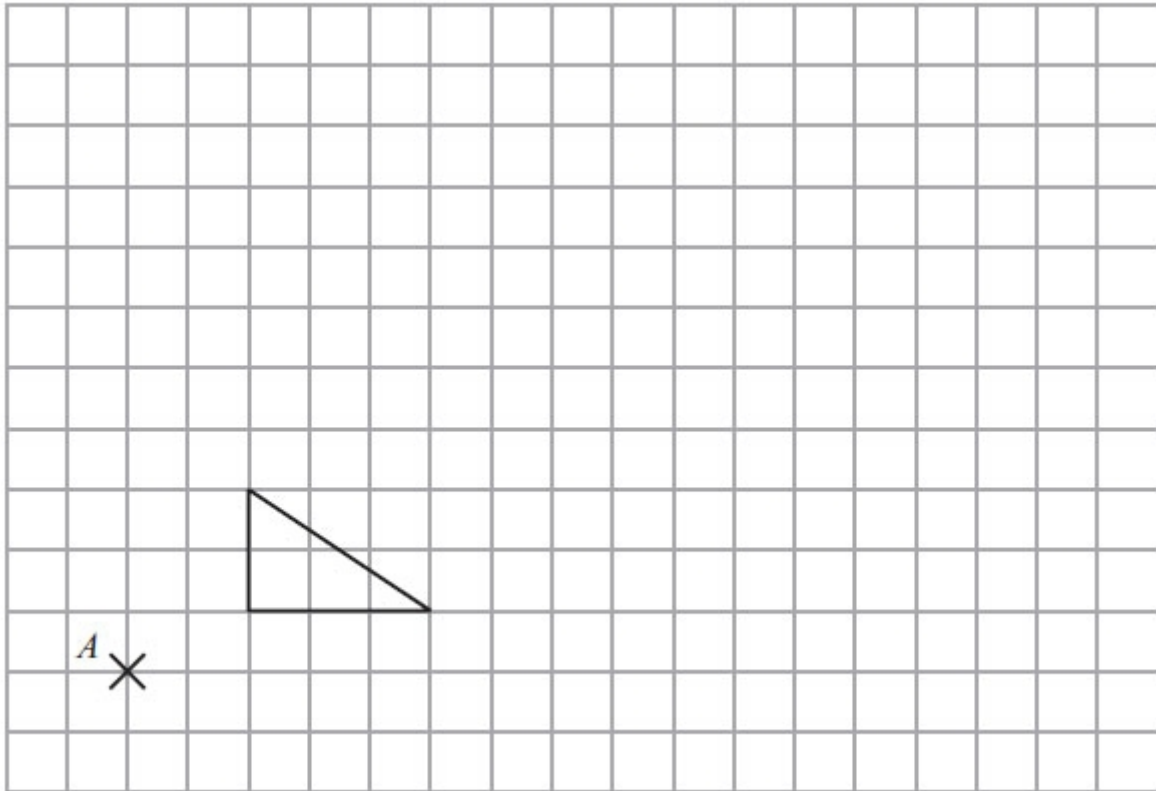
On the grid, enlarge the shape with scale factor 3, centre *A*.
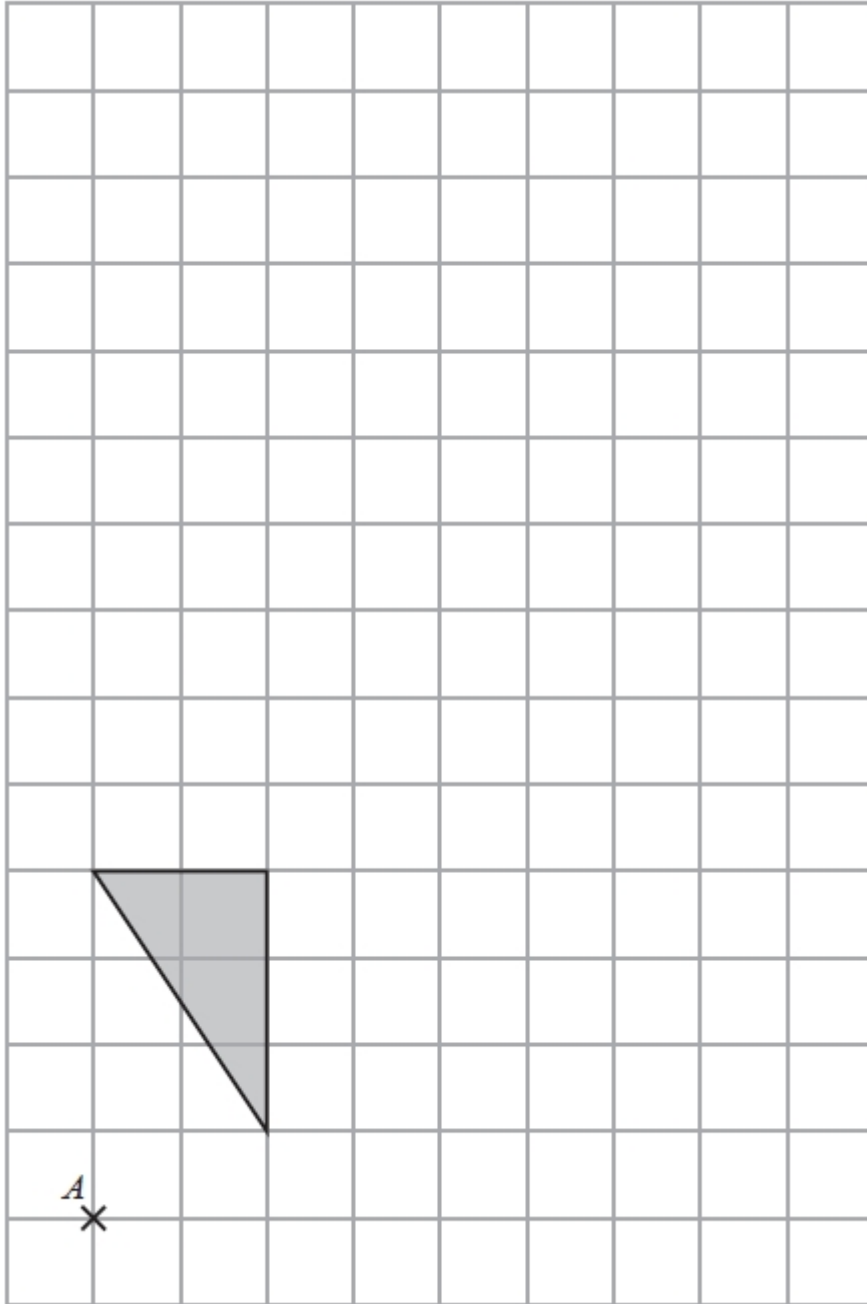
(Total for Question is 3 marks)

Q21.

On the grid, enlarge the triangle by scale factor –1½, centre (0, 2)

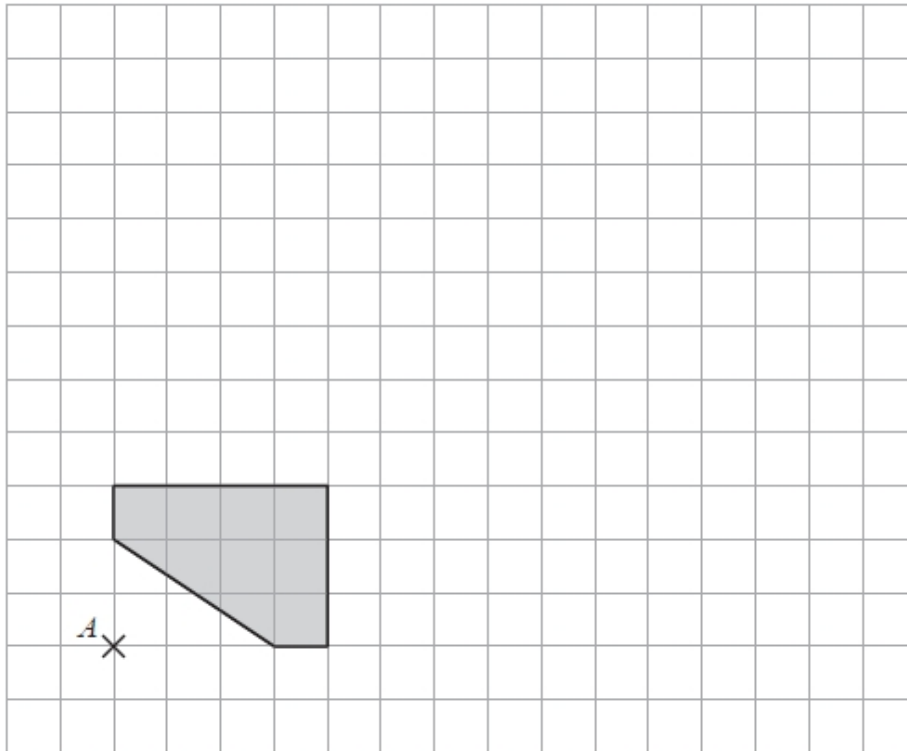**(Total for question = 2 marks)**

Q22.

A shaded shape is shown on the grid.

On the grid, enlarge the shape by a scale factor of 2, centre *A*.
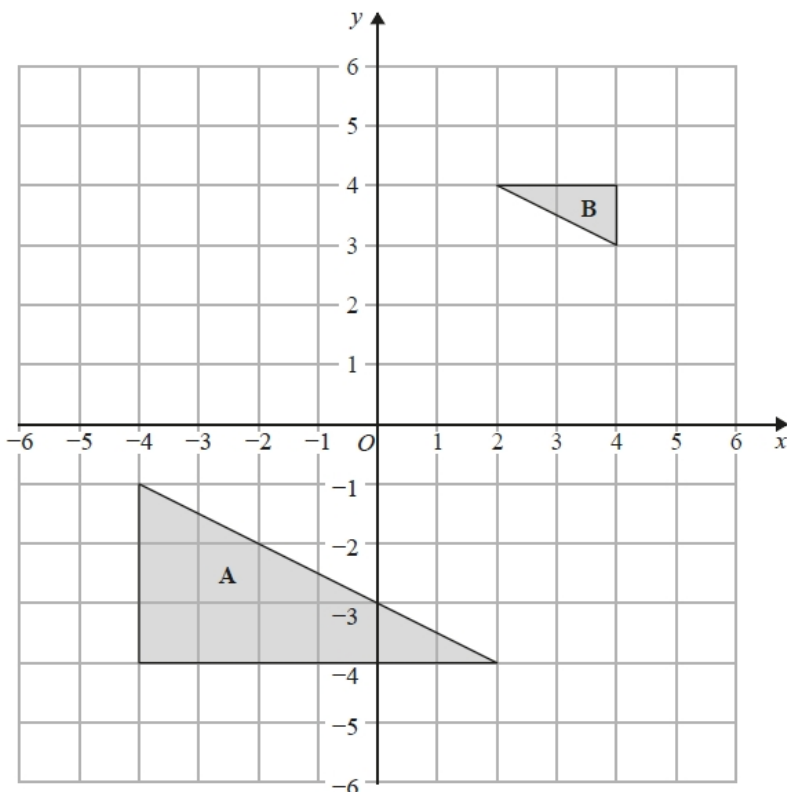
(Total for question = 2 marks)

Q23.

On the grid, enlarge the shape by scale factor 3, centre *A*.

(Total for question = 3 marks)

Q24.

Describe fully the single transformation that maps triangle **A** onto triangle **B**.

(2 marks)