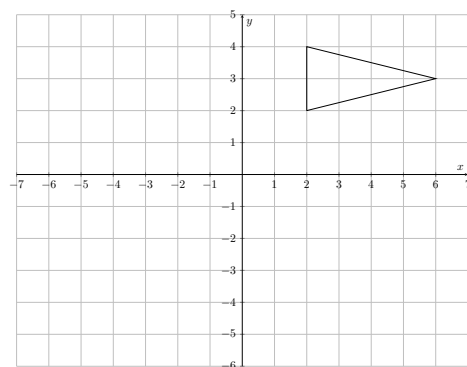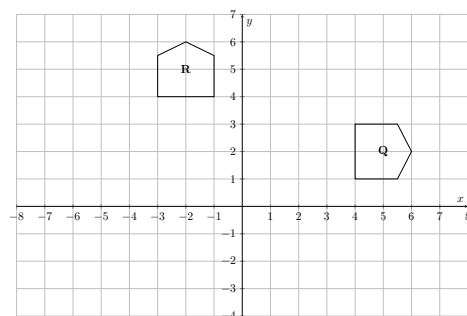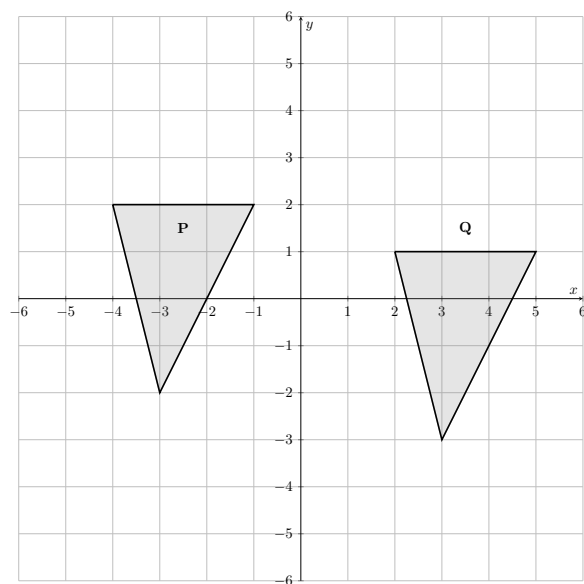# Chapter 1

GCSE Transformation Questions

1.

On the grid, enlarge the triangle by scale factor $-\frac{1}{2}$, centre $(0, -2)$. **(2)**

2.

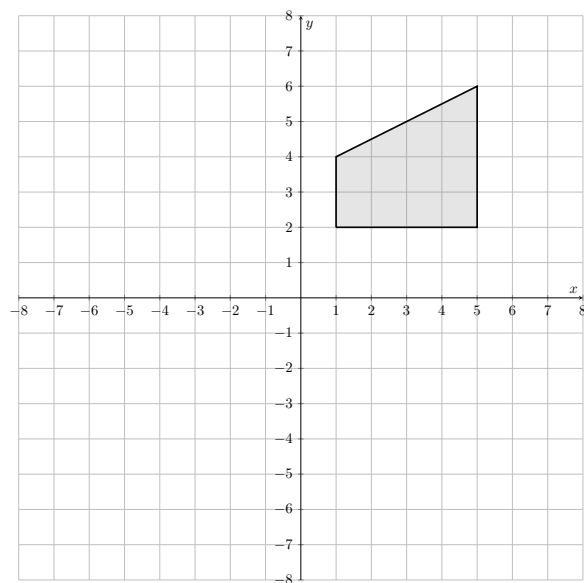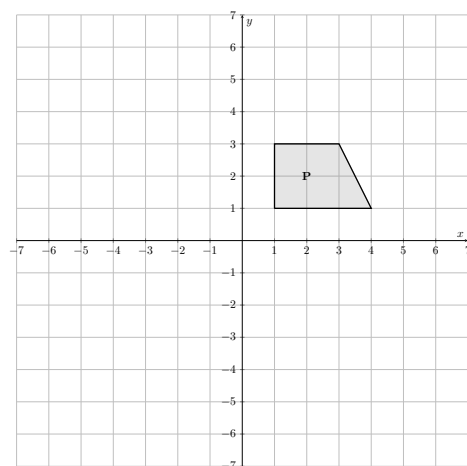Describe fully the single transformation that maps shape **Q** onto shape **R**. **(3)**

- -

3.

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

4.

Enlarge the shaded shape by scale factor $-\frac{1}{2}$ with centre $(-1, -2)$. **(3)**
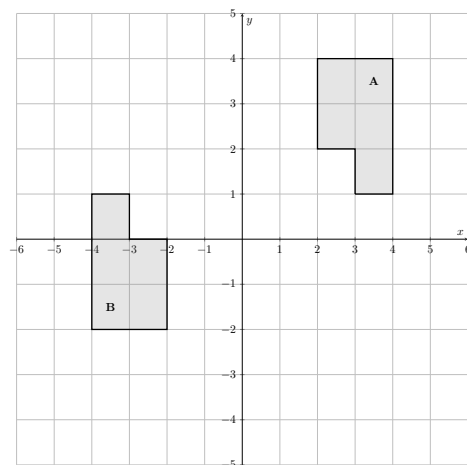
5.

Shape P is reflected in the line $x = -1$ to give shape Q.

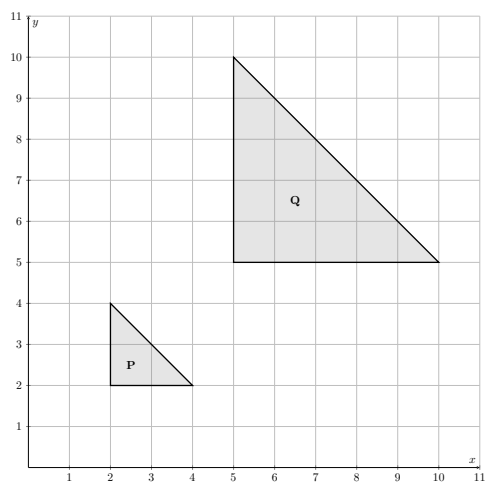Shape Q is reflected in the line $y = 0$ to give shape R.

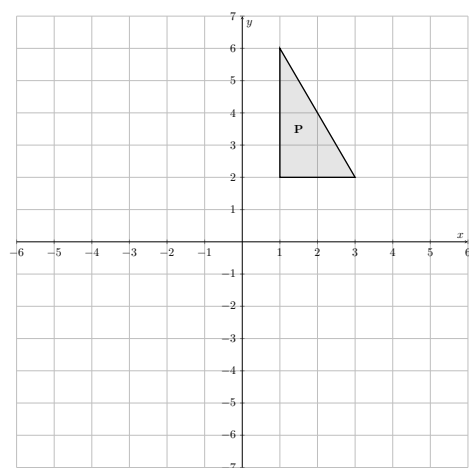Describe fully the single transformation that maps shape P onto shape R. **(3)**

- -

- -

6.

Describe fully the single transformation that maps shape **A** onto shape **B** **(3)**

- -

- -

3

7.

Describe fully the single transformation that maps shape **P** onto shape **Q**. **(3)**

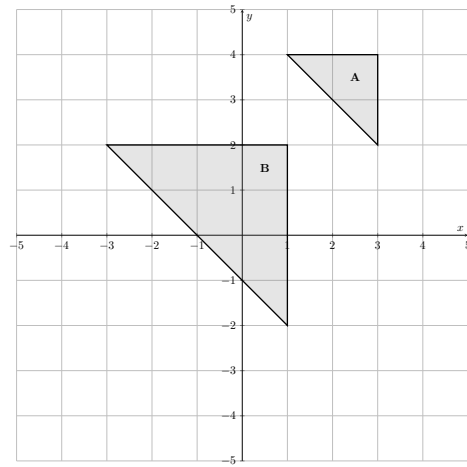--

8.

Triangle **P** is drawn on a coordinate grid. The triangle **P** is reflected in the line $x = -1$ and then reflected in the line $y = 1$ to give triangle **Q**.

Describe fully the single transformation which maps triangle **P** onto triangle **Q**. **(3)**

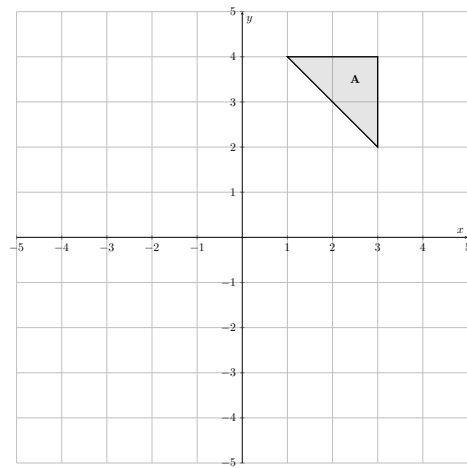--

9.

Triangle **A** and triangle **B** are drawn on the grid.

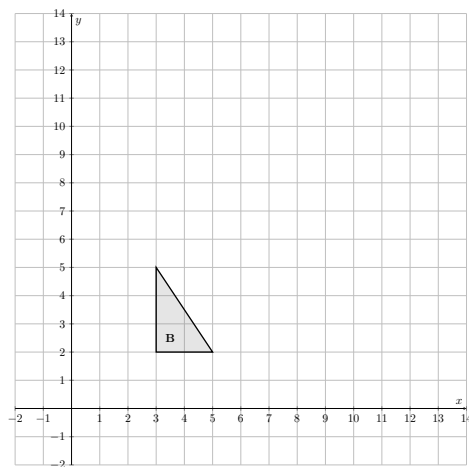(a) Describe fully the single transformation which maps triangle **A** onto triangle **B**. **(3)**

(b)

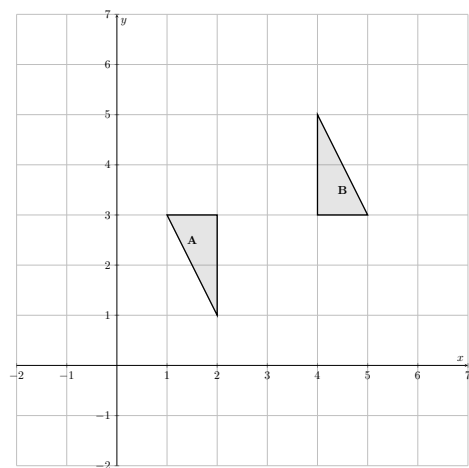Reflect triangle **A** in the line $x = 4$. **(2)**

5

10. (a)
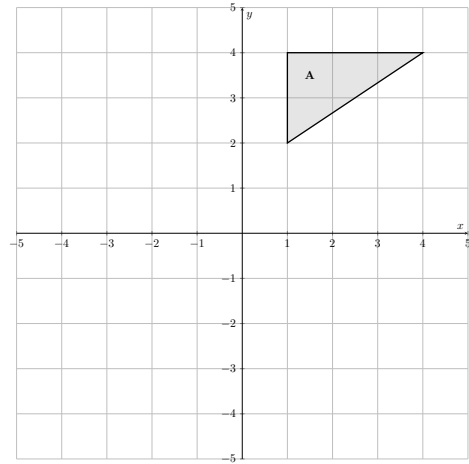
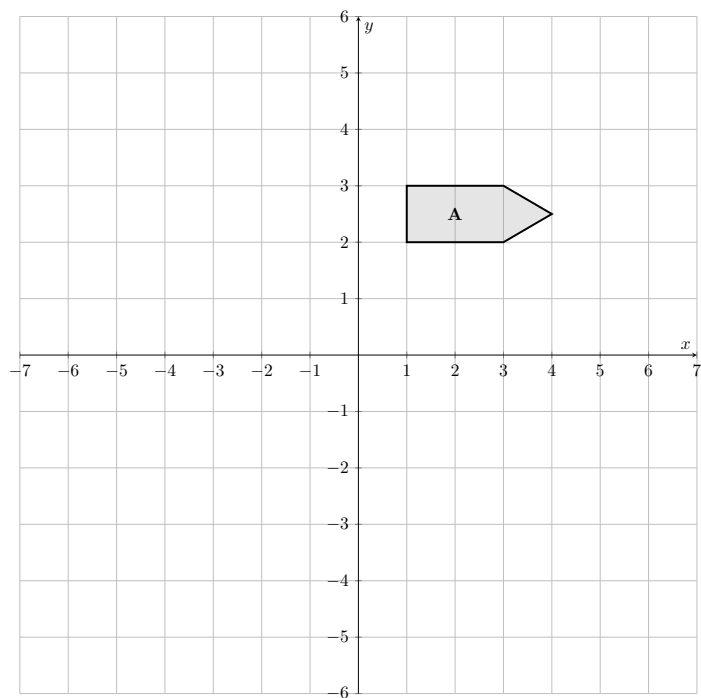Rotate triangle A 90° clockwise, centre O.

(b)

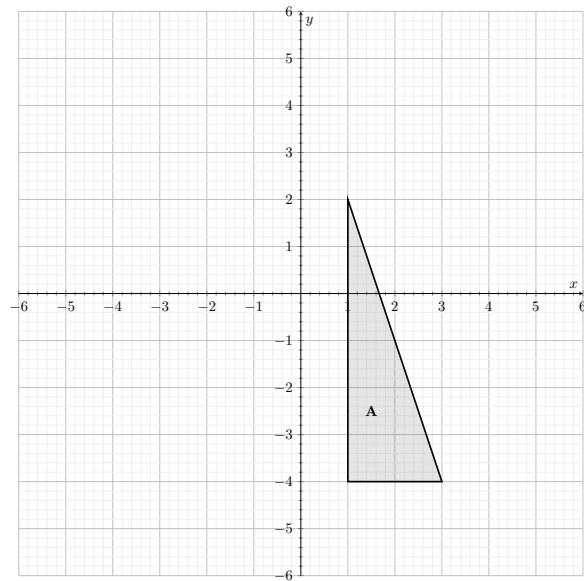Enlarge triangle **B** by scale factor 3, centre $(1, 2)$.

11.

Describe fully the single transformation that maps triangle **A** onto triangle **B**. **(3)**

- -
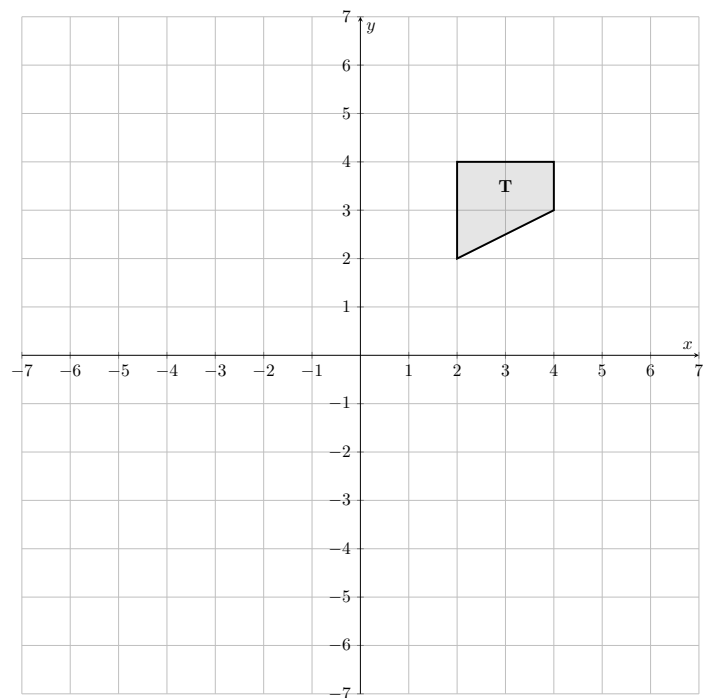
12. (a)

On the grid above, reflect shape **A** in the line $x = 1$. **(2)**
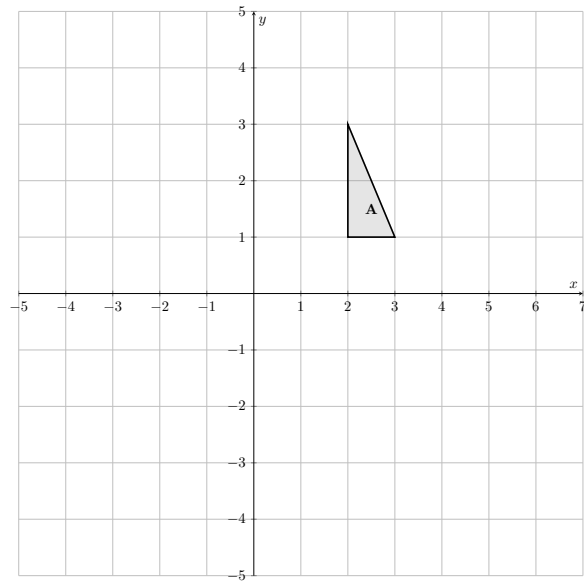
(b)

Enlarge triangle **A** by scale factor $-\frac{1}{2}$, centre $(-1, -2)$. Label your triangle **B**. **(2)**

13.

Enlarge shape **T** with scale factor -1.5, centre $(0, 2)$. **(3)**

14.

Enlarge triangle **A** by scale factor $-1\frac{1}{2}$, centre O. **(3)**