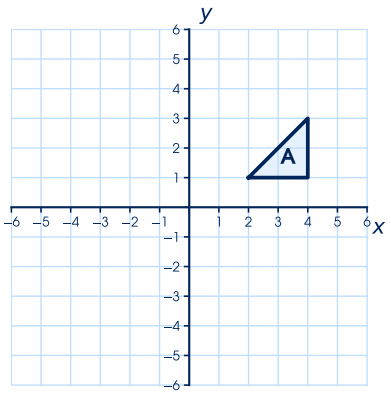
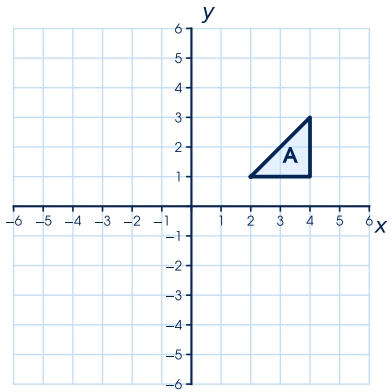
GCSE HIGHER · REVISION MAT 3

Transformations

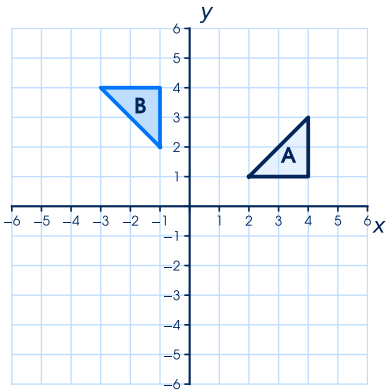
1 Reflect triangle A in the *y*-axis.



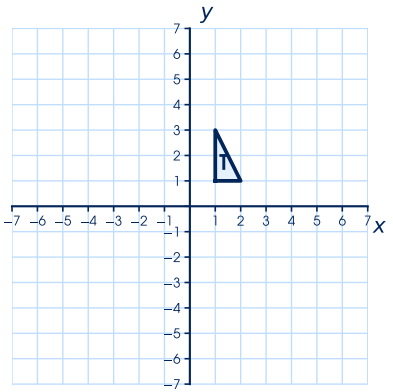
2 Translate triangle A by the vector (–2, –3).



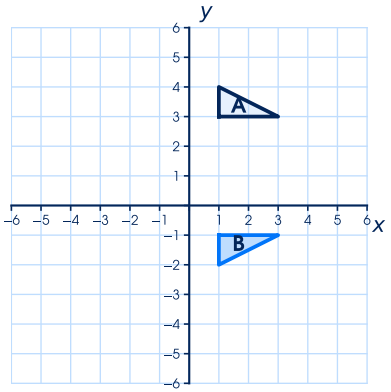
3 Describe fully the single transformation that maps A onto B.



4 Enlarge triangle T by scale factor 2, centre (0, 0).

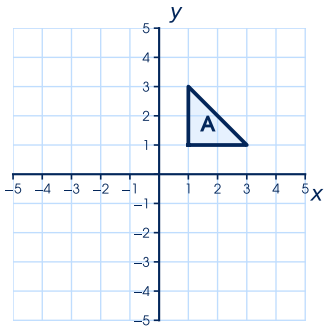


5 Describe fully the single transformation that maps A onto B.

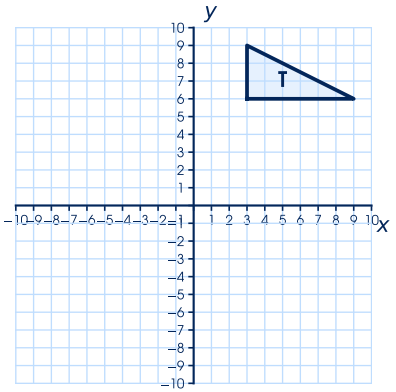


6 A shape is reflected in the *x*-axis and then in the *y*-axis.

Describe the single transformation that has the same effect.

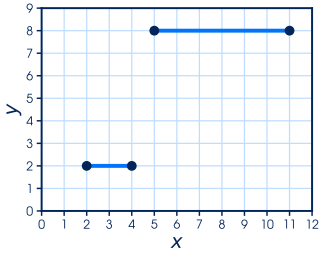


7 Enlarge triangle T by scale factor $\frac{1}{3}$, centre (0, 0).



8 An enlargement maps (2, 2) to (5, 8) and (4, 2) to (11, 8).

Find the scale factor and the centre.



Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Transformations

1 (−2, 1), (−4, 1), (−4, 3)

2 (0, −2), (2, −2), (2, 0)

3 Rotation 90° anticlockwise about (0, 0)

4 (2, 2), (4, 2), (2, 6)

5 Reflection in the line $y = 1$

6 $(x, y) \rightarrow (x, -y) \rightarrow (-x, -y)$

Rotation of 180° about (0, 0)

7 (1, 2), (3, 2), (1, 3)

8 Scale factor $\frac{11 - 5}{4 - 2} = 3$

Centre c: $3p - 2c = p'$

Scale factor 3, centre (0.5, −1)