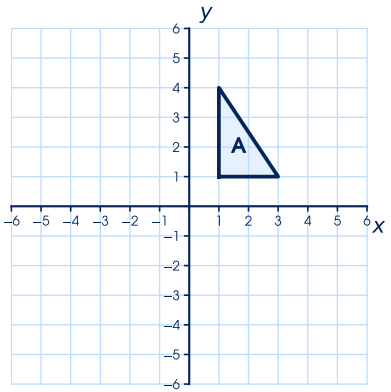
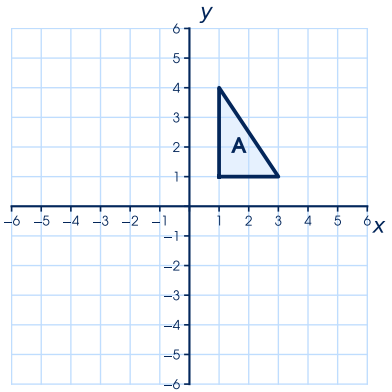
GCSE HIGHER · REVISION MAT 1

Transformations

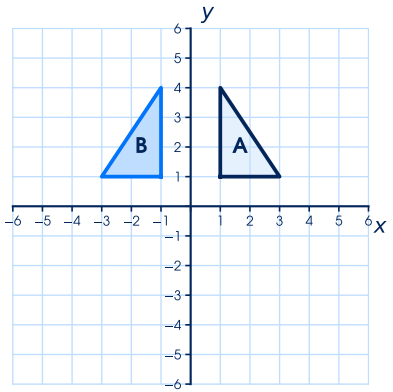
1 Translate triangle A by the vector (3, –2).



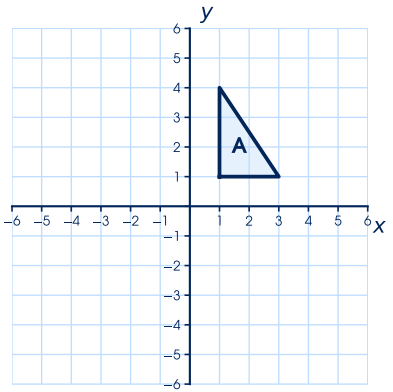
2 Reflect triangle A in the line $x = 1$.



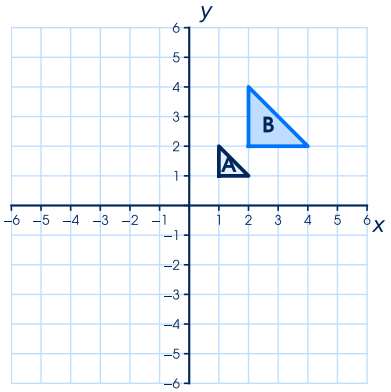
3 Describe fully the single transformation that maps A onto B.



4 Rotate triangle A 90° clockwise about the origin.

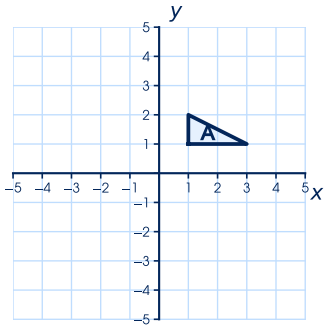


5 Describe fully the single transformation that maps A onto B.

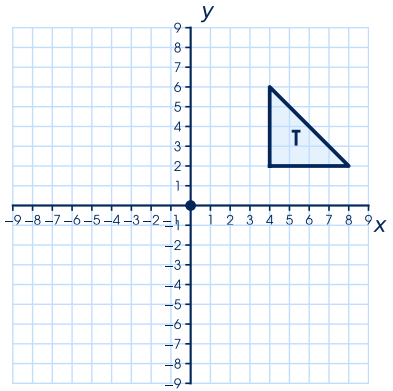


6 A shape is enlarged by scale factor –1 about the origin.

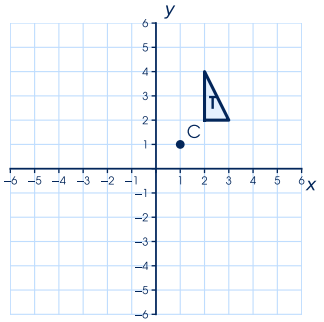
Explain why this is the same as a rotation of 180° about the origin.



7 Enlarge triangle T by scale factor $\frac{1}{2}$, centre (0, 0).



8 Enlarge triangle T by scale factor –2, centre (1, 1).



ANSWERS · REVISION MAT 1

Transformations

1 Vertices (4, −1), (6, −1), (4, 2)

2 Vertices (1, 1), (−1, 1), (1, 4)

3 Reflection in the y-axis ($x = 0$)

4 Vertices (1, −1), (1, −3), (4, −1)

5 Enlargement, scale factor 2, centre (0, 0)

6 Each point (x, y) goes to $(-x, -y)$ in both cases.

7 Vertices (2, 1), (4, 1), (2, 3)

8 Vertices (−1, −1), (−3, −1), (−1, −5)

Mr&Mrs MATHS