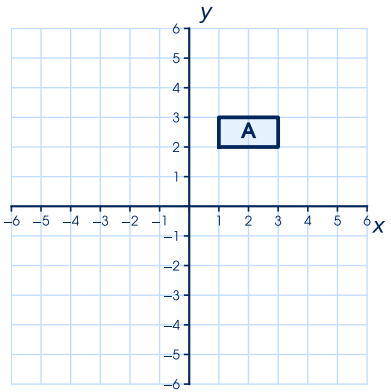
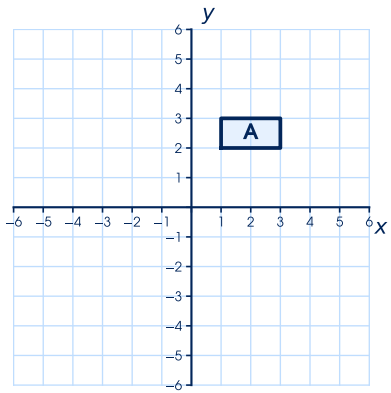
GCSE HIGHER · REVISION MAT 2

Transformations

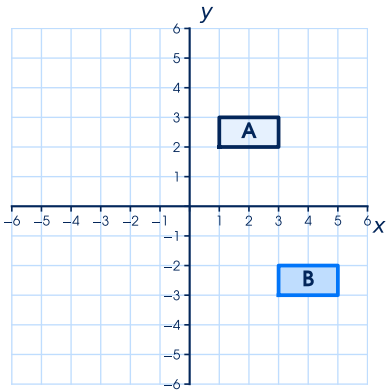
1 Translate rectangle A by the vector (–4, 1).



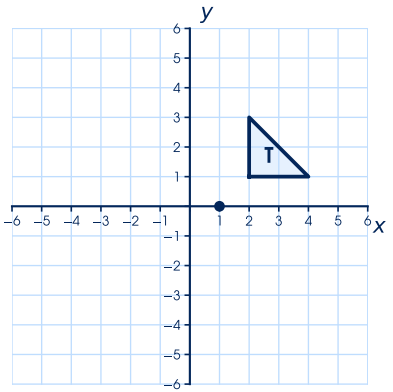
2 Reflect rectangle A in the *x*-axis.



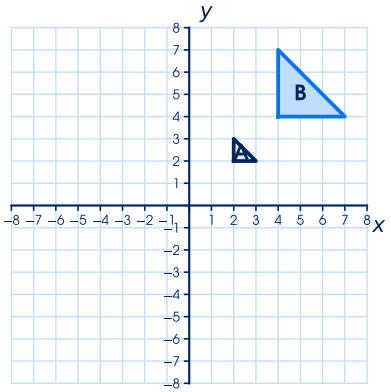
3 Describe fully the single transformation that maps A onto B.



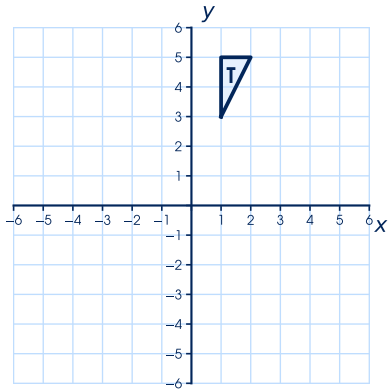
4 Rotate triangle T 180° about (1, 0).



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



6 Reflect triangle T in the line $y = x$.

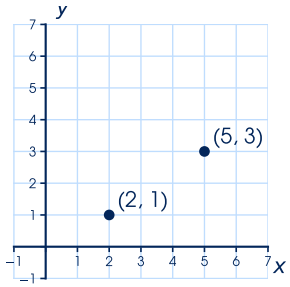


7 A shape is enlarged by scale factor 3.

Explain why its area is multiplied by 9.

8 The point (5, 3) is rotated 90° anticlockwise about (2, 1).

Find its image.



Mr&Mrs MATHS

ANSWERS · REVISION MAT 2

Transformations

1 (–3, 3), (–1, 3), (–1, 4), (–3, 4)

2 (1, –2), (3, –2), (3, –3), (1, –3)

3 Translation by vector (2, –5)

4 (0, –1), (–2, –1), (0, –3)

5 Enlargement, scale factor 3, centre (1, 1)

6 (3, 1), (5, 1), (5, 2)

7 Both length and width are multiplied by 3, so area is multiplied by 3 × 3 = 9.

8 Relative to centre: (3, 2)

Rotated: (–2, 3)

(0, 4)

Mr&Mrs MATHS