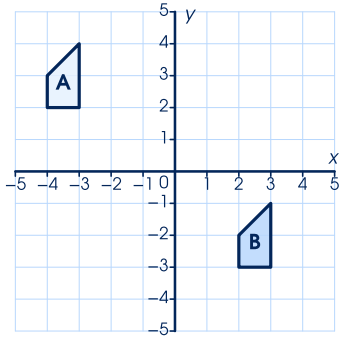
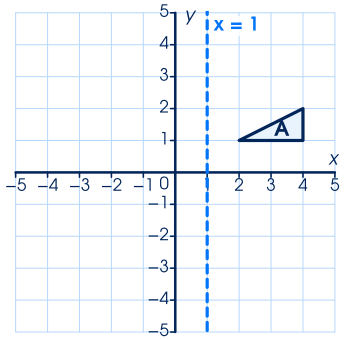
GCSE FOUNDATION · REVISION MAT 4

Transformations

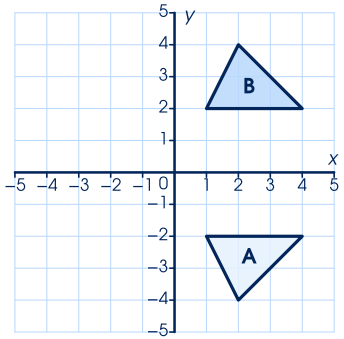
1 Describe fully the single transformation that maps shape A onto shape B.



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



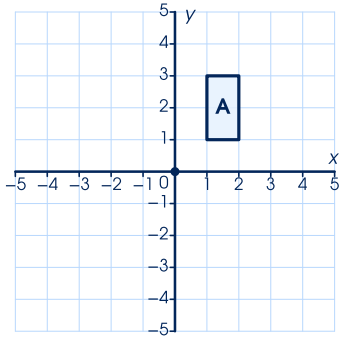
3 Shape A is mapped onto shape B.



Sam says this is a translation.

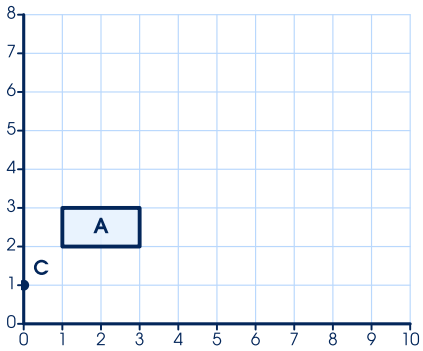
Explain why Sam is wrong.

4 Shape A is rotated 90° clockwise about the origin.



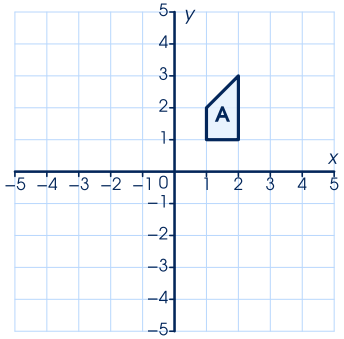
Show that the vertex at (2, 1) moves to (1, –2)

5 Enlarge shape A by scale factor 2, centre (0, 1).



How many times bigger is the area of the image?

6 Shape A is reflected in the x-axis to give shape B.
B is then reflected in the y-axis to give shape C.



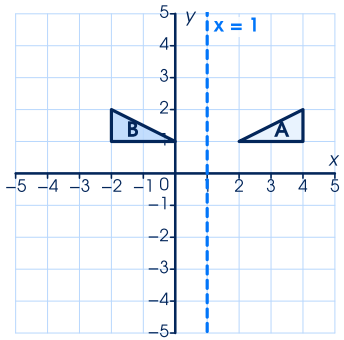
Describe fully the single transformation that maps A onto C.

ANSWERS · REVISION MAT 4

Transformations

1 **Translation** by $\begin{pmatrix} 6 \\ -5 \end{pmatrix}$

2

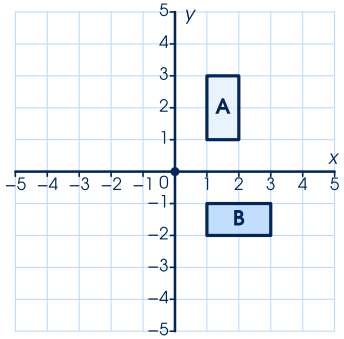


Each point is the same distance from the mirror line.

3 B is a mirror image of A (it is flipped), so it is not a translation.

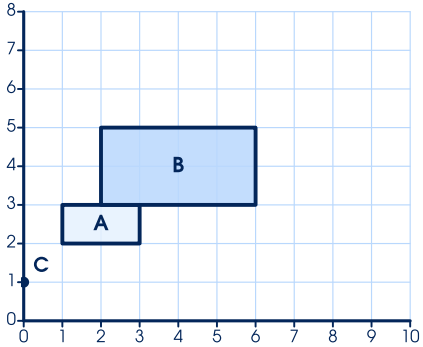
It is a **reflection in the *x*-axis**.

4



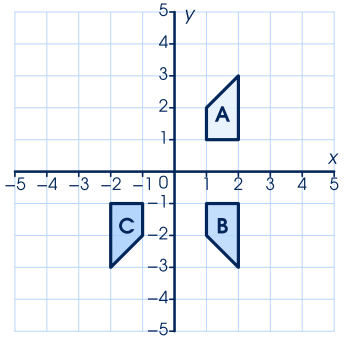
(2, 1) → **(1, –2)** ✓

5



Area is **4 times** bigger (2 → 8 squares)

6



Rotation of 180° about the origin