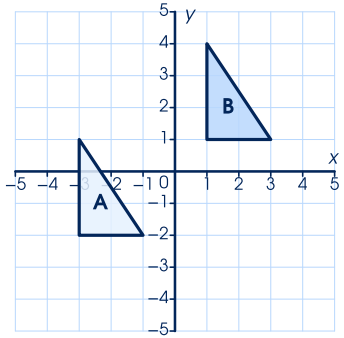
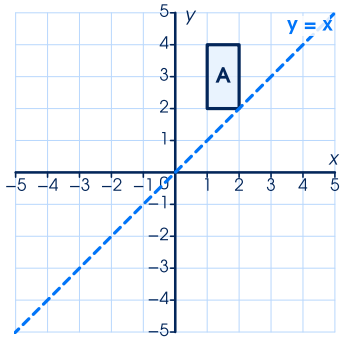
GCSE FOUNDATION · REVISION MAT 3

Transformations

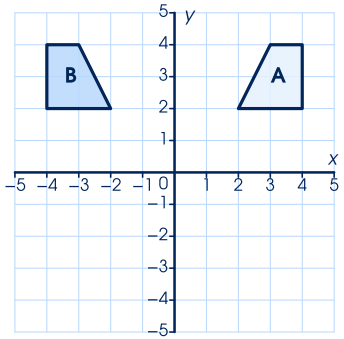
1 Describe fully the single transformation that maps shape A onto shape B.



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



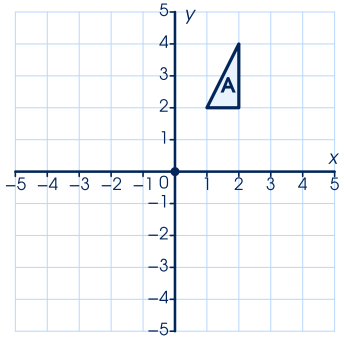
3 Shape A is mapped onto shape B.



Sam says this is a translation.

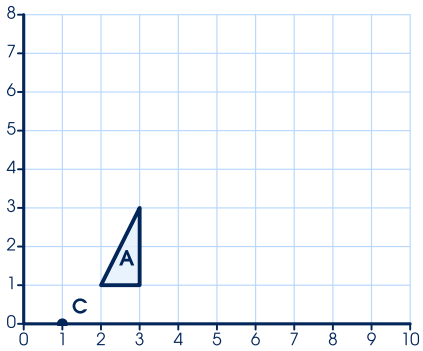
Explain why Sam is wrong.

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



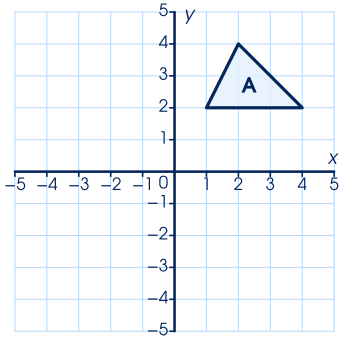
Show that the vertex at (2, 2) moves to (2, –2)

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



How many times bigger is the area of the image?

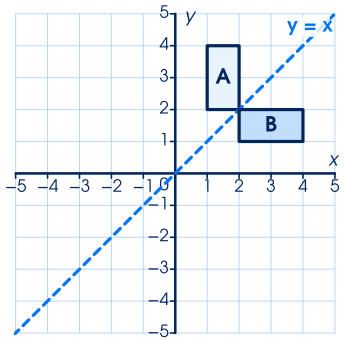
6 Shape A is reflected in the x-axis to give shape B.
B is then reflected in the y-axis to give shape C.



Describe fully the single transformation that maps A onto C.

1 **Translation** by $\begin{pmatrix} 4 \\ 3 \end{pmatrix}$

2



Each point is the same distance from the mirror line.

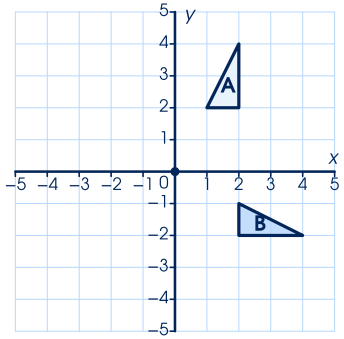
3 B is a mirror image of A (it is flipped), so it is not a translation.

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

ANSWERS · REVISION MAT 3

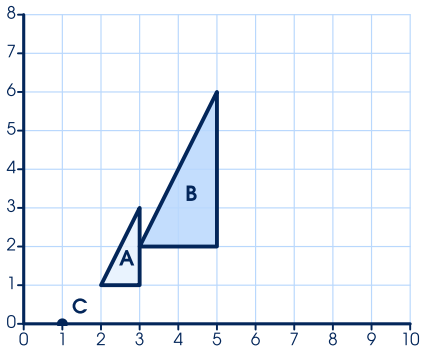
Transformations

4



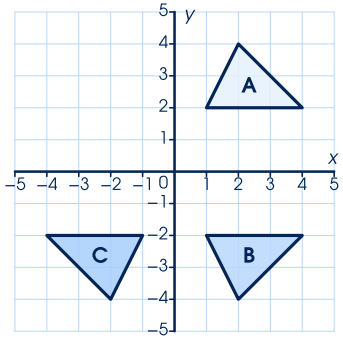
(2, 2) → **(2, –2)** ✓

5



Area is **4 times** bigger (1 → 4 squares)

6



Rotation of 180° about the origin