Topic Test 2 (20 minutes)
Transformations (non-calculator) - Higher

1 The sides of a square of side 5cm are enlarged by a scale factor 4

What is the scale factor of enlargement of its area?

Circle the correct answer.

[1 mark]

         4   8   16   25

2 Which of these transformations produces a new shape that is **not** congruent to the original?

Circle the correct answer.

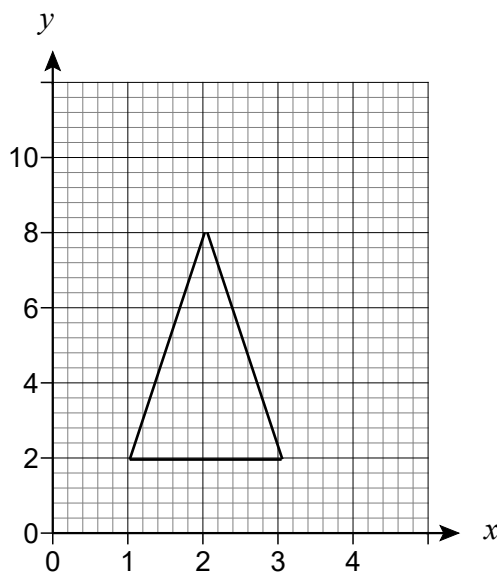**[1 mark]**

     Reflection   Enlargement   Rotation   Translation

3 What is the equation of the line of symmetry of this shape?

Circle the correct answer.
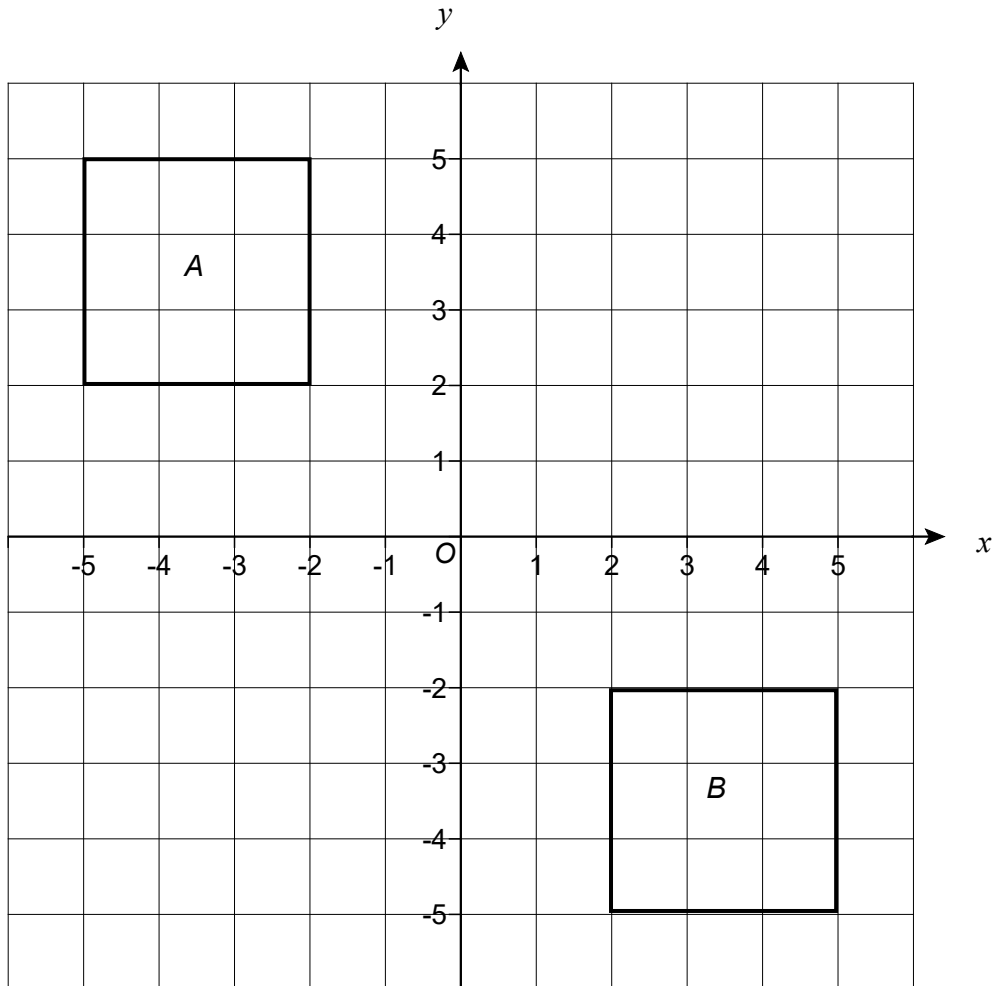
[1 mark]

    $y = 2$ $x = 2$ $y = 2 + x$ $y = 2x$

4 Describe fully the 3 **single** transformations that map square *A* onto *B*.
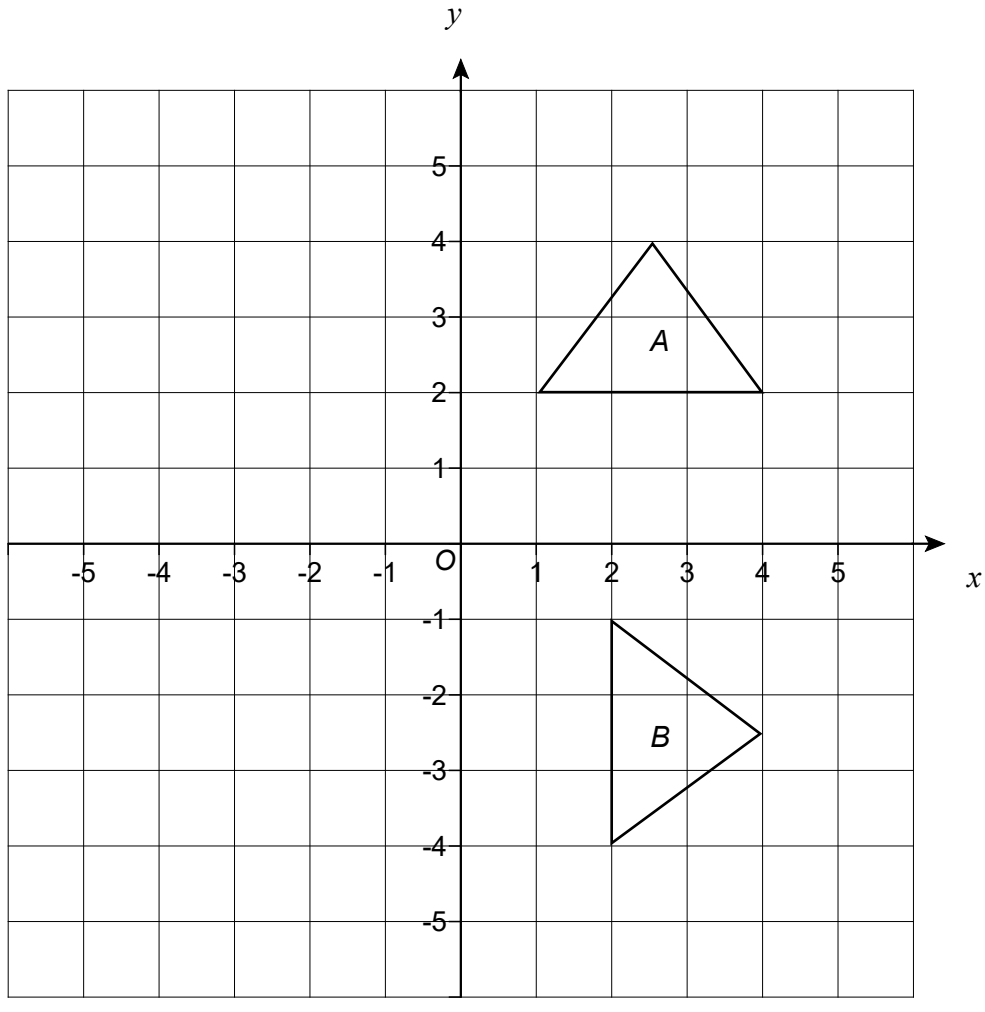
[6 marks]

Transformation 1

_____

Transformation 2

_____

Transformation 3

_____

5   Triangle *A* is mapped onto triangle *B* by the double transformation

reflection in the *y*-axis

and
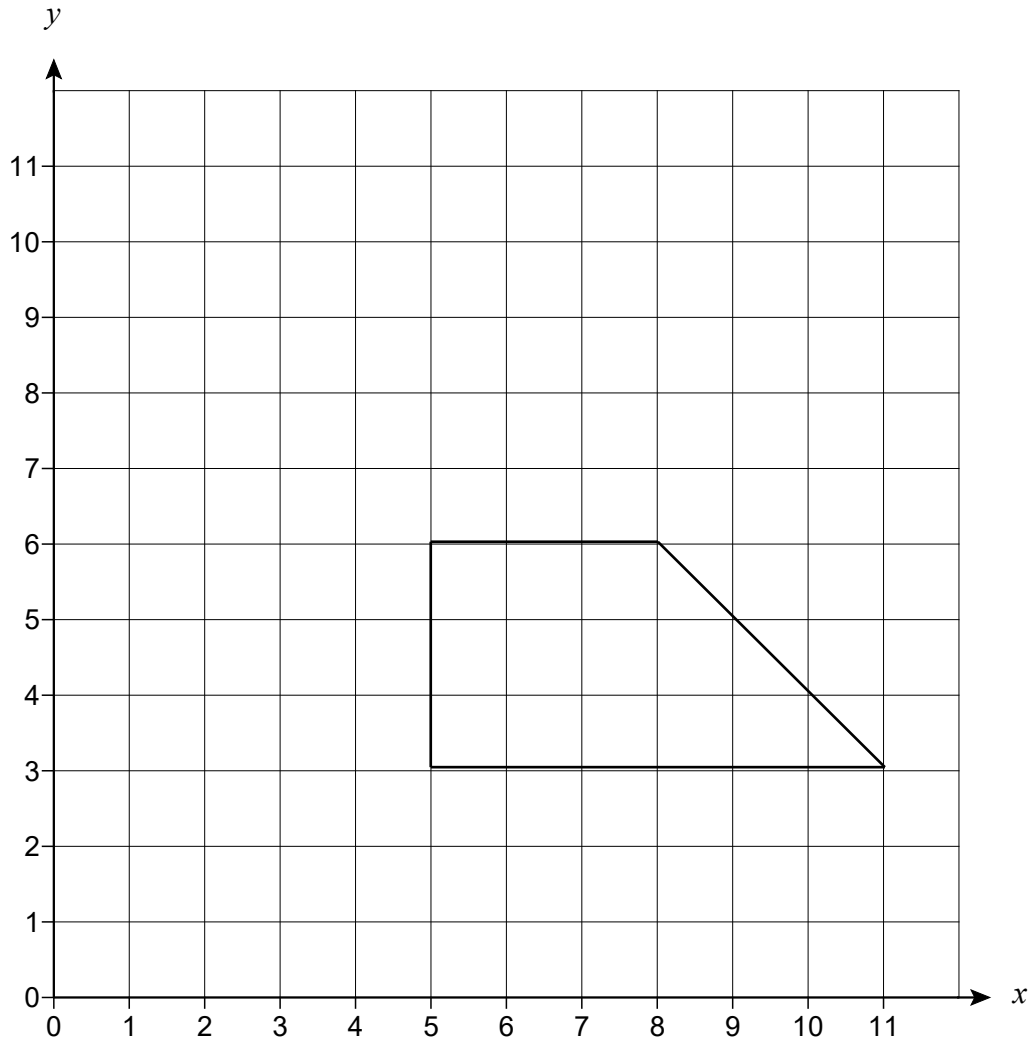
reflection in the line $y = x$

Describe the **single** transformation that maps triangle *A* onto triangle *B*.
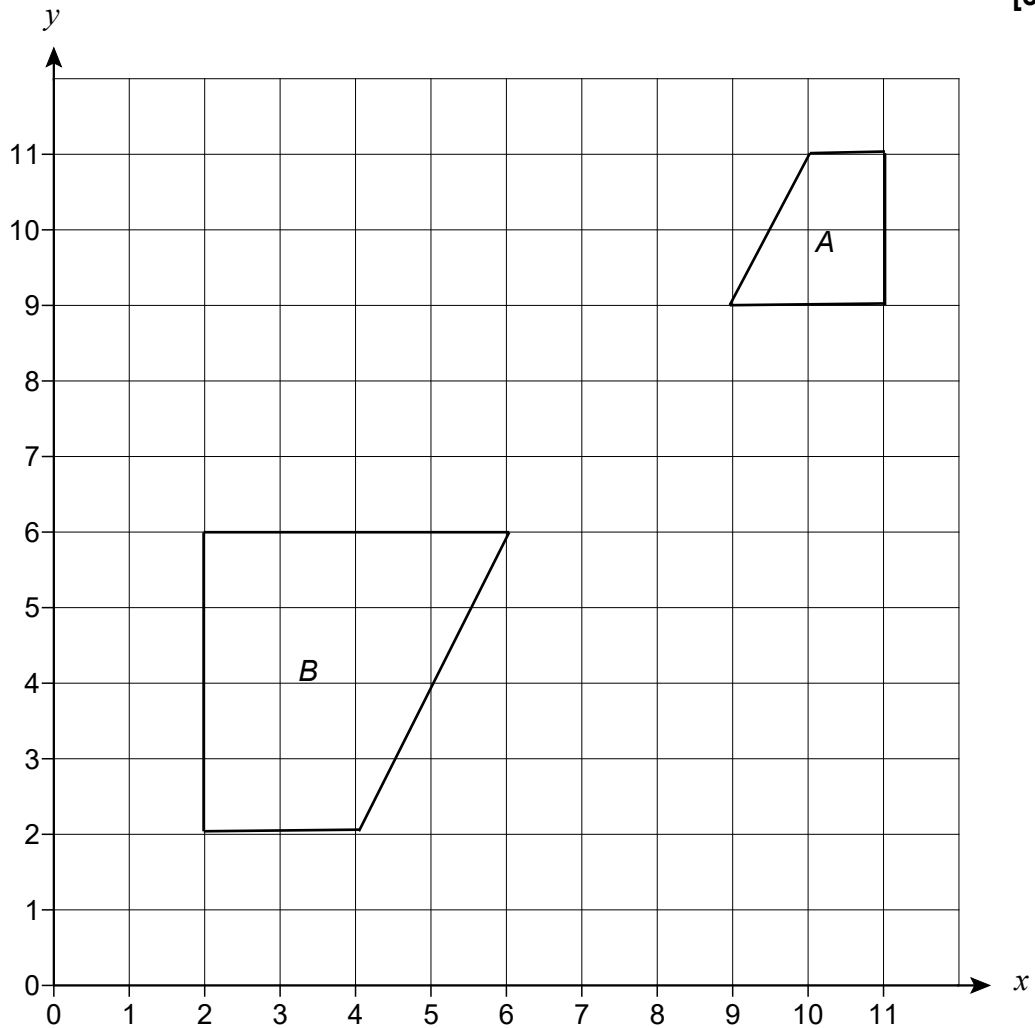
[3 marks]

6 Enlarge the shape by a scale factor $\frac{1}{3}$ with centre of enlargement at (2, 0)

[3 marks]

7 Describe the single transformation that maps shape *A* onto shape *B*.

[3 marks]

_____

_____

8 All the edges of a cuboid increase by length by 10%

Work out the percentage increase in the volume.

[2 marks]

_____

_____

_____

Answer _____