Maths – Year 10 Foundation – Unit 5

Describing Shape Transformations

Below is a list of things you must mention to get full marks on each question.

Reflection:

1.   You must state the word 'reflection'

2.   Give the equation of the mirror line the shape is reflected in e.g. y = 2x+1

Rotation:

1.   You must state the word 'rotation'

2.   Give the degrees and direction he shape has rotated e.g. 90 degrees clockwise.

3.   Give the coordinate of the centre of rotation (use tracing paper to find this)
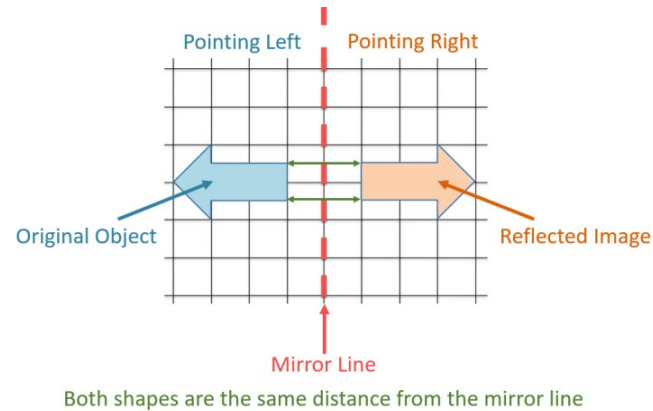
Enlargement:

1.   You must state the word 'enlargement'

2.   Say what 'scale factor' the shape has been enlarged by (how many times bigger/smaller the shape is)

3.   Give the coordinate of the centre of enlargement (you find this by drawing a line between corresponding vertices on the two shapes, where these lines meet is the centre of enlargement
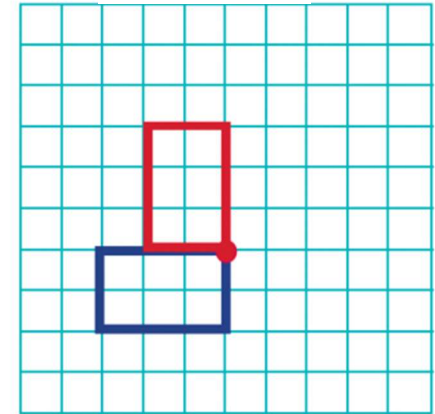
Translation:

1.   You must state the word 'translation'

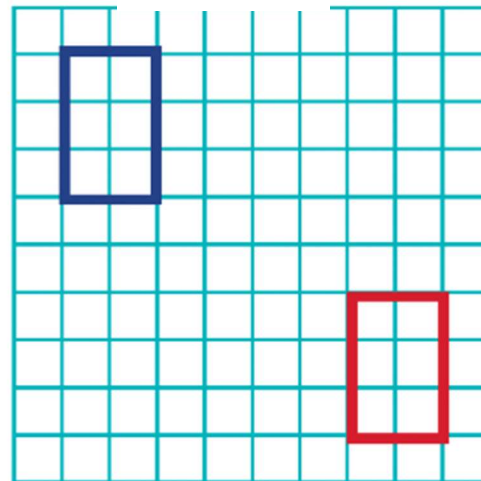2.   Give the direction the shape has been translated in as a column vector

Reflection

Pointing Left   Pointing Right

Original Object   Reflected Image

Mirror Line

Both shapes are the same distance from the mirror line

Rotation

Translation

Enlargement