

2			Refers to translation and stretch	M1	1.1	In either order; ignore details here; allow any equivalent wording (such as move or shift for translation) to describe geometrical transformations but not statements such as add -3 to x (do not accept ‘enlargement’ or ‘shear’ for stretch)	If M0 then award SC B1 for one correct transformation
			State translation $\begin{pmatrix} -3 \\ 0 \end{pmatrix}$	A1	1.1	Or state translation in x -direction by -3 (units); accept horizontal to indicate direction or parallel to the x -axis; term ‘translate’ or ‘translation’ needed for award of A1	Do not accept ‘in/on/across/up/along the x axis’ or ‘to the left’ only A0 for SF -3
			State stretch by scale factor 0.5 parallel to the x -axis	A1	1.1	Or in the x direction or horizontally; term ‘stretch’ needed for award of A1; these two transformations must be in this order – if details correct for M1A1A1 but order wrong, award M1A1A0	Allow ‘factor’ or ‘SF’ for ‘scale factor’. Do not accept ‘in/on/across/up/along the x axis’, ‘in the positive x -direction’, ‘SF 0.5 units’
				[3]			
			ALT 1 Or a stretch scale factor 0.5 parallel to the x -axis followed by translation $\begin{pmatrix} -1.5 \\ 0 \end{pmatrix}$				These transformations must be in this order for full marks
			ALT 2 Or a stretch scale factor 0.5 parallel to the x -axis and a stretch scale factor e^3 parallel to the y -axis				These transformations can be in either order (must refer to two stretches for the M mark)