Question		Answer	Marks	AO	Guidance
2	(a) (i)	$f(x) > 2$	B1 [1]	2.5	Correct range notation must be used e.g. $f(x)$, f or y but **not** x. Allow $(2,\infty)$ but **B0** for $[2,\infty),(2,\infty]$ etc. Allow $\{f(x) : f(x) > 2\}$ or equivalent **correct** set notation. **Must** be a strict inequality.
2	(a) (ii)	$y = (x-4)^2 + 2 \Rightarrow x = 4 \pm \sqrt{y-2}$ $(f^{-1}(x) =) 4 - \sqrt{x-2}$	M1 A1 [2]	1.1 2.2a	Correct order of operations to find inverse – allow sign errors only in rearranging. Allow taking either square root or $\pm$. May be implied by correct final expression. May immediately interchange x and y so may start with $x = (y-4)^2 + 2$. Must be taking negative square root and must be in terms of x. Allow the correct expression or $y = 4 - \sqrt{x-2}$ but **not** $x = 4 - \sqrt{x-2}$ or $f(x) = 4 - \sqrt{x-2}$.
	(a) (iii)	$f^{-1}(x) < 4$	B1 [1]	1.2	Correct range notation must be used – allow f^{-1}, y but **not** f or x. Allow $(-\infty,4)$ and equivalent **correct** set notation. **Must** be a strict inequality. Ignore working so mark final answer.
2	(a) (iv)	The graphs of $y = f(x)$ and $y = f^{-1}(x)$ are reflections of each other in the line $y = x$	B1 [1]	2.4	Must include 'reflection' or 'reflects' or 'mirror image' or 'mirrored' or 'mirror line' **and** '$y = x$'. **B0** for 'symmetrical' unless clearly describing reflective symmetry (e.g. 'they are symmetric about the line $y = x$' is **B0**).

Question		Answer	Marks	AO	Guidance
2	(b)	Translation and stretch	M1	1.1	Condone move or shift for translation but do not allow 'enlargement' or 'shear' or 'compression' for stretch. If **M0** then award **SC B1** for one fully correct transformation.
		Translation $\begin{pmatrix} 0 \\ 4 \end{pmatrix}$	A1	1.1	Or state 'translation in the (positive) y-direction by 4 (units)' or 'translation of 4 (units) parallel to the (positive) y-axis'. Accept 'vertical' to indicate direction. The word 'translate' or 'translation' is needed for **A1**. Do **not** allow 'in/on/across/up/along/to/towards the y-axis'. Do **not** accept 'up' for vertical. Do **not** accept factor or SF 4. **If both words and vector seen, then mark vector**. Do **not** accept 'translation of 4 (units) parallel to y' without mention of 'direction' or 'axis'.
		Stretch by scale factor $\frac{1}{3}$ parallel to the x-axis	A1	1.1	Or 'stretch by scale factor $\frac{1}{3}$ in the x-direction'. Accept 'horizontally' to indicate direction. The word 'stretch' is needed for **A1.** Allow 'factor' or 'SF' for 'scale factor' but 'stretch by $\frac{1}{3}$ in…' is **A0**. Do **not** allow 'in/on/across/up/along/to/towards the x-axis'. Do **not** allow 'in the positive/negative x-direction'. Do **not** allow 'SF $\frac{1}{3}$ units'. Do **not** allow either left or right to indicate 'horizontally'. Do **not** accept 'stretch of SF $\frac{1}{3}$ parallel to x' without mention of 'direction' or 'axis'. The two transformations can appear in either order.
			[3]		