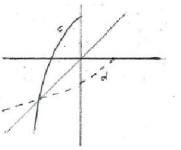
Question	Answer	Marks	Guidance
11(a)	Obtain $b=2$ and $c=\frac{3}{2}$	B1	
	Obtain $\frac{15}{2}-2\left(x-\frac{3}{2}\right)^2$	B1	
	State range is $y\leqslant\frac{15}{2}$ or $f(x)\leqslant\frac{15}{2}$ with $\leqslant$ given or clearly implied (not $<$)	B1 FT	Following *their* value of *a*.
		3	
11(b)	State that reflection is in *x*-axis	B1	Accept transformations in any order.
	State or imply that translation is by $\begin{pmatrix}-\frac{3}{2}\\ \frac{15}{2}\end{pmatrix}$ or equivalent	B1 FT	Following *their* values of *a* and *c* in part **(a)**. Accept transformations in any order.
		2	

Question	Answer	Marks	Guidance
11(c)	Sketch the correct graph appearing in second and third quadrants only	B1	
	State that each y-value is associated with a single x-value or equivalent	B1	Accept passes the horizontal line test. Ignore passes the vertical line test.
		2	
11(d)	Sketch the correct graph with suitable labelling to distinguish the two curves	B1	Appearing in third and fourth quadrants only.
	Draw the line $y = x$	B1	See above; no need to label the line.
	Attempt correct process for finding the inverse function	M1	Allowing use of $\pm$ and y so far.
	Obtain $\frac{3}{2} - \sqrt{\frac{15}{4} - \frac{1}{2}x}$ or equivalent	A1	Must involve x at the conclusion.
		4	