Question	Answer	Marks	Guidance
5(a)	Reflection [in] y-axis	**B1 B1**	B1 for reflection B1 mention of y-axis, OE. **SC B2** for stretch, SF –1, parallel to x-axis.
	Translation or shift $\begin{pmatrix}-1\\0\end{pmatrix}$	**B1***	B1 for 'translation' and a correct vector/description. Do not accept 'left'/'right'. If two translations then B0 and B0 for the order.
	Stretch, factor 2, parallel to y-axis	**B2,1,0**	B2 all correct OE. B1 any 2 parts correct. This can be at any point in the sequence.
	Correct order and three correctly named transformations only	**DB1**	If a fourth transformation is given this mark is not awarded and no marks are given for the two transformations of the same type, except where the reflection is described as a stretch. If any transformation is incorrectly named this cannot be given. If translation is not $\begin{pmatrix}-1\\0\end{pmatrix}$ or $\begin{pmatrix}1\\0\end{pmatrix}$ then DB0 is given.
	Alternative Solution for first 3 marks		
	Translation or shift $\begin{pmatrix}1\\0\end{pmatrix}$	**B1***	B1 for 'translation' and correct vector/description.
	Reflection [in] y-axis	**B1 B1**	B1 for 'reflection', B1 for 'in y-axis'.
	Alternative solutions		
	There are alternative solutions which can be marked in the same way e.g. the given stretch, translation $\begin{pmatrix}-4\\0\end{pmatrix}$, reflect in $x=-2.5$		
		6	

Question	Answer	Marks	Guidance
5(b)	$g(x)=2f(-x-1)$ or $a=2,\ b=-1,\ c=-1$	**B1**	First B1 for $a=2$ and no additional terms added to the function. $a=-2$ is B0.
		B1	Second B1 for $b=-1$ and $c=-1$.
		2	