Q	Marking instructions	AO	Marks	Typical solution
6(a)	Obtains $a = 2$	1.1b	B1	$y = 2(x^2 - 10x + 21)$
	Obtains $b = 5$	1.1b	B1	$y = 2(x^2 - 10x + 25 - 4)$
	Obtains $c = -8$	1.1b	B1	$y = 2((x - 5)^2 - 4)$
				$y = 2(x - 5)^2 - 8$
	Subtotal		**3**	

Q	Marking instructions	AO	Marks	Typical solution
6(b)	Obtains correct coordinates of their minimum point. FT their b and c Condone missing brackets.	1.1b	B1F	(5, –8)
	Subtotal		**1**	

Q	Marking instructions	AO	Marks	Typical solution
6(c)	Uses a stretch scale factor of $\frac{1}{2}$ FT $\pm$ their $\frac{-4}{c}$,do not FT $c = \pm 4$ PI by correct answer	3.1a	M1	$\text{scale factor} = \frac{-4}{-8} = \frac{1}{2}$
	Deduces their correct equation using their vertical stretch factor. ACF FT their c , do not FT $c = \pm 4$ ISW	2.2a	A1F	$y = 2(x - 5)^2 - 8$ $y = \frac{1}{2}\left[2(x-5)^2 - 8\right]$ $y = (x-5)^2 - 4$ $y = x^2 - 10x + 21$
	Subtotal		**2**	

	Question 6 Total		**6**	