Question			Answer	Marks	AO	Guidance
2	(a)		$3(x-...)^2...$	B1	1.1	Must be of the form $3(x \pm \alpha)^2 \pm \ldots$ where $\alpha \neq 0$.
			$\left(x-\frac{5}{2}\right)^2$	B1	1.1	oe Allow this mark if initial expression has been divided by 3.
			$...-\frac{47}{4}$	B1	1.1	oe Must come from $b=\frac{5}{2}$. Condone slips in notation. Ignore = 0 in working.
				[3]		
2	(b)		$\left(\frac{5}{2}, -\frac{47}{4}\right)$	B1FT B1FT	1.2 1.2	Correct x-coordinate or follow through their b from part **(a)**. Correct y-coordinate or follow through their $-c$ from part **(a)**. Condone missing brackets. Allow $x=\frac{5}{2}, y=-\frac{47}{4}$ oe.
				[2]		
2	(c)		$x < \frac{5}{2}$ or $x \leq \frac{5}{2}$	B1FT	1.1	Follow through their x-coordinate from part **(b)** – ignore set notation for this mark but must be using x if no set notation is seen. Allow $x \in \left(-\infty, \frac{5}{2}\right)$ or $x \in \left(-\infty, \frac{5}{2}\right]$ for this mark.
			$\left\{x: x < \frac{5}{2}\right\}$ or $\left\{x: x \leq \frac{5}{2}\right\}$	B1FT	2.5	With their x-coordinate from part **(b)**. Could use any letter. Interval notation **only** is insufficient for this mark.
				[2]		