Question		Working	Answer	Mark	Notes
24	(a)	$-3(x+4)^2$ ..... **or** $-3\left[(x+4)^2 .....\right]$ **or** $-3\left(x+\frac{-24}{2\times-3}\right)^2+....$		3	M1 for a start to completing the square **or** correct substitution into $a\left(x+\frac{b}{2a}\right)^2+....$ from the formula $a\left(x+\frac{b}{2a}\right)^2-\frac{(b)^2}{4a}+c$
		$-3\left[(x+4)^2-4^2\right]$..... **or** $-3\left[(x+4)^2-4^2.....\right]$ **or** $-3\left[(x+4)^2-16.....\right]$ **or** $-3\left(x+\frac{-24}{2\times-3}\right)^2-\frac{(-24)^2}{4\times-3}...$ **or** $-3(x+4)^2+48.....$			M1 for correctly completing the square but terms do not need to be simplified and 10 may or may not be present **or** correct simplification of the first two parts of $a\left(x+\frac{b}{2a}\right)^2-\frac{(b)^2}{4a}(+c)$
		Correct answer scores full marks (unless from obvious incorrect working)	$58-3(x+4)^2$		A1 oe eg $-3(x+4)^2+58$
	(b)		$(-3, 58)$	1	B1 ft their expression in part (a)
	(c)		$x=-3$	1	B1 ft their expression in part (a) **or** ft their x coordinate in part (b)
					Total 5 marks