

2	(a)	$5[x^2 - 4x] + 3$ $= 5[(x - 2)^2 - 4] + 3$ $= 5(x - 2)^2 - 17$	$p = 5$ $(x - 2)^2$ $r = -17$	B1 B1 B1 [3]	1.1 1.1 1.1	No marks until attempt to complete the square Must be of the form $5(x \pm \alpha)^2 \pm \dots$	
2	(b)	Minimum point $(2, -17)$		B1ft B1ft [2]	1.1 1.1	Follow through their $-q$ Follow through their r	Or by differentiation
2	(c)	$x = 2$		B1ft [1]	1.1	Follow through their x coordinate in part (b)	