

Question			Answer	Marks	AO	Guidance	
1	(a)		$3[(x + 4)^2 - 16] + 5 \dots$	B1	1.1	No marks until attempt to complete the square Must be of the form $3(x \pm \alpha)^2 \pm \dots$ where $\alpha \neq 0$	If they compare coefficients $a = 3$ B1 , $b = 4$ B1 , $c = -43$ B1
			$(x + 4)^2$	B1	1.1	Allow $(x + \frac{8}{2})^2$	
			$3(x + 4)^2 - 43$	B1	1.1	If expression set to 0, ignore = 0	$3(x^2 + 4)^2 - 43$ scores B0 B0 B1
				[3]			
1	(b)		$y \leq 0$ $y \geq 3x^2 + 24x + 5$	B1 B1	1.1 1.1	Accept $-43 \leq y \leq 0$ If B0 B0 then SC B1 if both 'correct' but with strict inequalities	
				[2]			