Q	Marking instructions	AO	Marks	Typical solution
10	Expands $\frac{dy}{dx}$ with at least one term correct	1.1a	M1	$\frac{dy}{dx} = (x+2)(4x^2 - 4x + 1)$
	Obtains $4x^3 + 4x^2 - 7x + 2$	1.1b	A1	$\frac{dy}{dx} = 4x^3 + 4x^2 - 7x + 2$
	Integrates their cubic expansion with at least one term correct	3.1a	M1	$y = x^4 + \frac{4}{3}x^3 - \frac{7}{2}x^2 + 2x + c$
	Integrates their expansion correctly to obtain an expression for y FT their cubic expansion of $\frac{dy}{dx}$ Condone missing $+ c$	1.1b	A1F	$900 = 1296 + 288 - 126 + 12 + c$ $c = -570$
	Substitutes $x = 6$ and $y = 900$ into their quartic equation and finds a value for c	1.1a	M1	$y = x^4 + \frac{4}{3}x^3 - \frac{7}{2}x^2 + 2x - 570$
	Obtains $y = x^4 + \frac{4}{3}x^3 - \frac{7}{2}x^2 + 2x - 570$	2.2a	A1	
	Question 10 Total		**6**	