

Question			Answer	Marks	AO	Guidance
11	(a)		$5\sqrt{4} - 4 - 6 = 10 - 10 = 0$	B1	1.1	Command word ‘verify’ so attempts at solving score zero. Need to see the substitution of the given value(s) and minimal processing to obtain 0 on the RHS

Question			Answer	Marks	AO	Guidance
			$5\sqrt{9} - 9 - 6 = 15 - 15 = 0$	B1	1.1	Need to see the substitution of the given value(s) and minimal processing to obtain 0 on the RHS
				[2]		
11	(b)		$\int_{(4)}^{(9)} \left(5x^{\frac{1}{2}} - x - 6 \right) dx$	M1	1.1	Attempting the integration (ignore limits) and obtaining at least two terms of the correct form in $\alpha x^{\frac{3}{2}} + \beta x^2 + \gamma x$ where $\alpha, \beta, \gamma \in \mathbb{R}$
			$\frac{10}{3}x^{\frac{3}{2}} - \frac{x^2}{2} - 6x$ oe	A1	1.1	Fully correct integrated expression- coeffs need not be simplified, but they must be correct.
			$\left[\frac{10}{3}9^{\frac{3}{2}} - \frac{9^2}{2} - 6(9) \right] - \left[\frac{10}{3}4^{\frac{3}{2}} - \frac{4^2}{2} - 6(4) \right]$	M1	1.1	Must show substitution of corrects limits into their integrand of the correct form and subtract the right way - detailed reasoning required. NB $-4.5 - \left(-\frac{16}{3}\right)$
			$-\frac{9}{2} - \left(-\frac{16}{3}\right) = \frac{5}{6}$	A1	1.1	At least one line of working required before seeing the final answer Accept equivalents or a decimal – awrt 0.833.
				[4]		