

Q	Marking instructions	AO	Marks	Typical solution
3	Uses power law for logarithms at least once	1.1a	M1	$\log_a x^3 = \log_a 72 - \log_a 3^2$ $\log_a x^3 = \log_a \frac{72}{9} = \log_a 8$ $x^3 = 8$ $x = 2$
	Uses subtraction law for logarithms OE PI by $\log_a 8$ OE Condone $\frac{\log_a 72}{\log_a 9}$ if recovered to $\log_a 8$ Condone omission of the base a	1.1a	M1	
	Obtains $\log_a 8$ on right-hand side of equation OE Or $\log_a 9x^3$ on left-hand side Condone omission of the base a	1.1b	A1	
	Obtains $x = 2$ CAO	1.1b	A1	
	Question 3 Total		4	