

Q	Marking instructions	AO	Marks	Typical solution
6(a)	Uses a law of logs correctly	1.1a	M1	$\log_2 x^2 - \log_2 y = 2\log_2 x - \log_2 y$ $= 2p - q$
	Obtains $2p - q$ with no incorrect use of logs	1.1b	A1	
	Subtotal		2	

Q	Marking instructions	AO	Marks	Typical solution
6(b)	Rewrites $\sqrt{y}$ as $y^{\frac{1}{2}}$ Pl by $\frac{1}{2}\log_2 y$ or $\frac{1}{2}q$	1.1b	B1	$\log_2 16 + \log_2 x^3 + \log_2 y^{\frac{1}{2}}$ $= 4 + 3\log_2 x + \frac{1}{2}\log_2 y$ $= 4 + 3p + \frac{1}{2}q$
	Uses logs correctly to obtain three terms	3.1a	M1	
	Obtains $4 + 3p + \frac{1}{2}q$ with no incorrect use of logs seen	1.1b	A1	
	Subtotal		3	

	Question 6 Total		5	
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