

Q	Marking instructions	AO	Marks	Typical solution
5	Expresses 4^{2x} and 4^x in terms of u At least one of $16u^2$ or $-33u$ correct	1.1a	M1	$16u^2 - 33u + 2 = 0$ $u = 2$ or $u = \frac{1}{16}$ $4^x = 2$ or $4^x = \frac{1}{16}$ $x = \frac{1}{2}$ or $x = -2$
	Obtains 2 and $\frac{1}{16}$ ACF	1.1b	A1	
	Obtains $x = \frac{1}{2}$ or $x = -2$ CSO	1.1b	A1	
	Obtains $x = \frac{1}{2}$ and $x = -2$ CSO	1.1b	A1	
	Question 5 Total		4	