

Question			Answer	Marks	AO	Guidance	
5	(a)		$\frac{1}{4}x^4 \dots$ $-3x^2 + c$	M1 A1 A1 [3]	1.1a 1.1 1.1	Attempt to integrate Correct integral including $+c$	At least one power increases by one
5	(b)	(i)	$\frac{4}{x^2} = 4x^{-2}$ $-4x^{-1} \dots$ $-x + c$ oe	B1 M1 A1 [3]	1.1 1.1a 1.1	soi Attempt to integrate a power not a positive integer Correct integral including $+c$ Penalise omission of $+c$ only once	
5	(b)	(ii)	$\int_1^2 \left(\frac{4}{x^2} - 1 \right) dx - \int_2^5 \left(\frac{4}{x^2} - 1 \right) dx$ Area = $2\frac{4}{5}$ oe	M1 A1FT A1 [3]	3.1a 1.1 1.1	Add absolute areas Correct integrals seen or $[their(ii)(a)]_1^2 - [their(ii)(a)]_2^5$ BC	Both M1 and A1 may be implied by correct answer SC1 for $-\frac{4}{5}$ or $\frac{4}{5}$