

Question	Scheme	Marks	AOs
2	$x^4 \rightarrow \dots x^5$ or $x^{\frac{1}{2}} \rightarrow \dots x^{\frac{3}{2}}$ or $-3 \rightarrow \dots x$	M1	1.1a
	Any of $\frac{1}{5}x^5$ or $-\frac{6}{\left(\frac{3}{2}\right)}x^{\frac{3}{2}}$ or $-3x$	A1	1.1b
	Any two of $\frac{1}{5}x^5$ or $-\frac{6}{\left(\frac{3}{2}\right)}x^{\frac{3}{2}}$ or $-3x$	A1	1.1b
	$\frac{1}{5}x^5 - 4x^{\frac{3}{2}} - 3x + c$	A1	1.1b
		(4)	

(4 marks)

Notes

M1:	For increasing any power by one. Score for $x^n \rightarrow x^{n+1}$ in any term, including, $-3 \rightarrow \dots x$ where ... is a constant, but not for + c. Allow the indices to be unprocessed, e.g., $x^{4+1}$
A1:	One correct term which may be unsimplified and indices may be unprocessed. Condone e.g. $-3x^1$ or $-\frac{6}{\left(\frac{1}{2}+1\right)}x^{\frac{1}{2}+1}$ for this mark. Not scored for + c
A1:	Two correct terms which may be unsimplified but indices must be processed. Condone $-3x^1$ for this mark. Not scored for + c
A1:	cao Requires all terms simplified and + c Ignore the LHS i.e. ignore what they call their integral. Allow $0.2x^5$ for $\frac{1}{5}x^5$ and $-4\sqrt{x^3}$ or $-4\sqrt{x^3}$ or $-4x\sqrt{x}$ or $-4x^{1.5}$ for $-4x^{\frac{3}{2}}$ Do not allow $-3x^1$ for this mark. Condone spurious integral signs e.g. $\int \frac{1}{5}x^5 - 4x^{\frac{3}{2}} - 3x + c$ or dx left in their answer ISW after a correct expression seen e.g. if they multiply through by 5 or e.g. try to solve = 0 Do not allow e.g. $\frac{1}{5}x^5 + -4x^{\frac{3}{2}} + -3x + c$