Question	Scheme	Marks	AOs
1	$x^n \to x^{n+1}$	M1	1.1b
	$\int\left(8x^3-\frac{3}{2\sqrt{x}}+5\right)\mathrm{d}x=\frac{8x^4}{4}...+5x$	A1	1.1b
	$=...-2\times\frac{3}{2}x^{\frac{1}{2}}+...$	A1	1.1b
	$=2x^4-3x^{\frac{1}{2}}+5x+c$	A1	1.1b
		(4)	
			(4 marks)

Notes

M1: For raising any correct power of *x* by 1 including $5\to 5x$ (not for + *c*) Also allow eg $x^3 \to x^{3+1}$

A1: For 2 correct non-fractional power terms (allow unsimplified coefficients) and may appear on separate lines. The indices must be processed. The + *c* does not count as a correct term here. Condone the 1 appearing as a power or denominator such as $\frac{5x^1}{1}$ for this mark.

A1: For the correct fractional power term (allow unsimplified) Allow eg $+-2\times1.5\sqrt{x^1}$.

Also allow fractions within fractions for this mark such as $\frac{\frac{3}{2}}{\frac{1}{2}}x^{\frac{1}{2}}$

A1: All correct and simplified and on one line including + *c*. Allow $-3\sqrt{x}$ or $-\sqrt{9x}$ for $-3x^{\frac{1}{2}}$.

Do not accept $+-3x^{\frac{1}{2}}$ for this mark.

Award once a correct expression is seen and isw but if there is any additional/incorrect notation and no correct expression has been seen on its own, withhold the final mark.

Eg. $\int 2x^4-3x^{\frac{1}{2}}+5x+c\ \mathrm{d}x$ or $2x^4-3x^{\frac{1}{2}}+5x+c=0$ with no correct expression seen earlier are both A0.