Question	Answer	Marks	Partial Marks
12	$x^{\frac{1}{2}} + 2 + x^{-\frac{1}{2}}$	**B2**	**B1** for $(x^{\frac{1}{4}} + x^{-\frac{1}{4}})^2$ or $\frac{x + 2\sqrt{x} + 1}{\sqrt{x}}$ oe seen or for two terms correct in $x^{\frac{1}{2}} + 2 + x^{-\frac{1}{2}}$
	At least two terms correct in *their* $\left[\frac{dy}{dx} =\right] \frac{2}{3}x^{\frac{3}{2}} + 2x + 2x^{\frac{1}{2}} (+c)$	**M1**	**FT** *their* $x^{\frac{1}{2}} + 2 + x^{-\frac{1}{2}}$ providing at least two terms correct and no extra spurious terms
	$\frac{4}{3} = \frac{2}{3}\left[1^{\frac{3}{2}}\right] + 2[1] + 2\left[1^{\frac{1}{2}}\right] + c$	**M1**	**dep** on previous **M1** and having an arbitrary constant; condone one sign or arithmetic slip
	$\int\left(\frac{2}{3}x^{\frac{3}{2}} + 2x + 2x^{\frac{1}{2}} - \frac{10}{3}\right)dx$ $= \frac{4}{15}x^{\frac{5}{2}} + x^2 + \frac{4}{3}x^{\frac{3}{2}} - \frac{10}{3}x + A$	**A1**	**FT** *their* $-\frac{10}{3}$
	$-1 = \frac{4}{15}\left[1^{\frac{5}{2}}\right] + 1^{[2]} + \frac{4}{3}\left[1^{\frac{3}{2}}\right] - \frac{10}{3}[1] + A$	**M1**	**dep** on previous **A1**; condone one sign or arithmetic slip
	$y = \frac{4}{15}x^{\frac{5}{2}} + x^2 + \frac{4}{3}x^{\frac{3}{2}} - \frac{10}{3}x - \frac{4}{15}$ oe	**A1**	