

Question	Answer	Marks	Guidance
5(a)	Attempt correct process for solving 3-term quadratic equation in $\sqrt{x}$	<b>M1</b>	Accept $8y^2 - 6y - 9 \rightarrow (2y - 3)(4y + 3)$ , if $y = \sqrt{x}$ specified.
	Obtain at least $2\sqrt{x} - 3 = 0$ or equivalent	<b>A1</b>	Ignore $4\sqrt{x} + 3 = 0$ . <b>SC B1</b> for $\sqrt{x} = \frac{3}{2}$ with no method shown for solving the 3-term quadratic.
	Conclude $x = \frac{9}{4}$ ignore $\frac{9}{16}$	<b>A1</b>	<b>SC B1</b> if no method shown for solving the 3-term quadratic.
	<b>Alternative Method for Q5(a)</b>		
	$3\sqrt{x} = 4x - \frac{9}{2} \rightarrow 16x^2 - 45x + \frac{81}{4}$ o.e and attempt correct process to solve	<b>M1</b>	
	Obtain $x = \frac{9}{4}$ or $\frac{9}{16}$	<b>A1</b>	<b>SC B1</b> if no method shown for solving the 3-term quadratic.
	$x = \frac{9}{4}$ ignore $\frac{9}{16}$	<b>A1</b>	<b>SC B1</b> if no method shown for solving the 3-term quadratic.
		<b>3</b>	

Question	Answer	Marks	Guidance
5(b)	Integrate to obtain form $k_1x^2 + k_2x^{\frac{3}{2}} + k_3x$ where $k_1k_2k_3 \neq 0$	M1	
	Obtain correct $2x^2 - 2x^{\frac{3}{2}} + x$ or equivalent	A1	Allow unsimplified.
	Substitute $x = 4$ and $y = 11$ to attempt value of $c$	M1	Dependent on at least 2 correct terms involving $x$ .
	Obtain $y = 2x^2 - 2x^{\frac{3}{2}} + x - 9$	A1	Must be simplified. Allow 'f(x) ='. Allow $y$ missing if $y$ appears previously.
		4	