Question	Answer	Marks	Partial Marks
9(b)(iii)	$81=\dfrac{81p}{1-\dfrac{p}{3}}$ or $81=\dfrac{243p}{3-p}$	**M1**	For attempt to solve using *their* answer to (ii) as far as p = …
	$p=\dfrac{3}{4}$	**A1**	
10(a)(i)	$\dfrac{(\sec\theta+1)-(\sec\theta-1)}{\sec^2\theta-1}$	**M1**	For dealing with the fractions
	$\dfrac{2}{\tan^2\theta}$	**M1**	For use of the correct identity
	$2\cot^2\theta$	**A1**	A1 for given answer, must see $\dfrac{8}{\tan^2\theta}$ first
10(a)(ii)	$2\cot^2 2x=6$ $\tan 2x=\pm\dfrac{1}{\sqrt{3}}$	**M1**	M1 for use of (i) and attempt to simplify
		A1	
		M1	M1 for attempt to solve, may be implied by one correct solution
	$2x=-150^\circ,\ -30^\circ,\ 30^\circ,\ 150^\circ$ $x=-75^\circ,\ -15^\circ,\ 15^\circ,\ 75^\circ$	**A2**	A1 for each pair of correct solutions
10(b)	$\sin\left(y+\dfrac{\pi}{3}\right)=\dfrac{1}{2}$	**M1**	For dealing with cosec and an attempt to solve
	$y+\dfrac{\pi}{3}=\dfrac{5\pi}{6},\ \dfrac{13\pi}{6}$	**M1**	M1 for a complete method of solution, may be implied by a correct solution
	$y=\dfrac{\pi}{2}$	**A1**	
	$y=\dfrac{11\pi}{6}$	**A1**	

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Question	Answer	Marks	Partial Marks
11	$\frac{dy}{dx} = \frac{5}{2}\sin 2x(+c)$	**M1**	M1 for $k\sin 2x$
		A1	Condone omission of c
	$\frac{3}{4} = \frac{5}{2}\sin\left(-\frac{\pi}{6}\right) + c$	**M1**	Dep on first M1 for attempt to find c
	$c = 2$	**A1**	
	$y = -\frac{5}{4}\cos 2x + 2x(+d)$	**M1**	M1 for attempt to integrate *their* $\frac{dy}{dx}$
		A1	Condone omission of d
	$\frac{5\pi}{4} = -\frac{5}{4}\cos\left(-\frac{\pi}{6}\right) - \frac{\pi}{6} + d$	**M1**	Dep on previous M1 for attempt to find d
	$d = \frac{17\pi}{12} + \frac{5\sqrt{3}}{8}$ $y = -\frac{5}{4}\cos 2x + 2x + \frac{17\pi}{12} + \frac{5\sqrt{3}}{8}$ or $y = -\frac{5}{4}\cos 2x + 2x + 5.53$	**A1**	Must have the equation for A1