Question	Answer	Marks	Guidance
8(a)	Use $\tan^2\beta = \dfrac{\sin^2\beta}{\cos^2\beta}$	B1	E.g. $\tan^2\beta = \dfrac{\sin^2\beta}{\cos^2\beta}$ and then replaces $\sin^2\beta$ with a^2 or $\cos^2\beta$ with $1-a^2$.
	$\cos\beta = -\sqrt{1-a^2}$	B1	
	Obtain $\dfrac{a^2}{1-a^2} + 3a\sqrt{1-a^2}$	B1	
		3	

Question	Answer	Marks	Guidance
8(b)	Use correct identity to obtain 3-term quadratic equation in $\sin\theta$	*M1	
	Obtain $\sin^2\theta+4\sin\theta+1[=0]$	A1	
	Attempt to solve quadratic	DM1	At least as far as $\frac{-4\pm\sqrt{12}}{2}$. -15.5° implies attempt at solving quadratic.
	Obtain 195.5	A1	
	Obtain 344.5	A1FT	Following first answer; and no others for $0^\circ<\theta<360^\circ$ but must be in 4th quadrant. **SC B1** for 3.41^c and 6.01^c.
		5	