

Question		Answer	Marks	AO	Guidance	
1	(a)	$2\left(1 - \frac{1}{2}\theta^2\right) + (1 - \theta)^2$ $2 - \theta^2 + 1 - 2\theta + \theta^2$ $= 3 - 2\theta \quad \text{A.G.}$	B1 M1 A1 [3]	2.1 2.1 2.1	Correct statement Attempt to expand and simplify given expression Obtain given answer	First term could possibly already be expanded Max of M1A1 if neither $(1 - \theta)^2$ nor $1 - 2\tan\theta + \tan^2\theta$ seen
	(b)	$3 - 2\theta = 28\theta$ $\theta = 0.1$	M1 A1 [2]	1.1a 1.1	Use $28\sin\theta \approx 28\theta$ and attempt to solve Obtain 0.1 oe	BOD if 0.1° ISW once 0.1 seen