

Question	Answer	Marks	AO	Guidance
6	DR $6(1 - \sin^2 x) = 5 - \sin x$ $6 \sin^2 x - \sin x - 1 = 0$ $(2 \sin x - 1)(3 \sin x + 1) = 0$ $\sin x = \frac{1}{2} \text{ giving } x = 30, 150$ $\sin x = -\frac{1}{3} \text{ giving } x = 199.5, 340.5$	M1 M1 A1 FT A1 [4]	1.1a 1.1 1.1 1.1	Uses correct identity to form equation in $\sin x$ Rearranges and attempts to solve their 3 term quadratic leading to 2 values for $\sin x$ At least one correct value for x in the range $0^\circ < x < 360^\circ$ FT their value for $\sin x$ for first A mark only All 4 correct values and no extras in the range $0^\circ < x < 360^\circ$