

Q	Marking Instructions	AO	Marks	Typical Solution
4	Uses substitution $\cos^2 x = 1 - \sin^2 x$ in any form	1.2	B1	$9\sin^2 x - 6\sin x + (1 - \sin^2 x) = 0$
	Solves 'their' quadratic to obtain two values for $\sin x$	1.1a	M1	$8\sin^2 x - 6\sin x + 1 = 0$
	Finds two correct solutions for x	1.1b	A1	$(4\sin x - 1)(2\sin x - 1)$ $\sin x = \frac{1}{4}$
	Finds all four solutions for x and no extras (condone 14.5, 165.5 AWRT)	1.1b	A1	$\sin x = \frac{1}{2}$ $14^\circ, 30^\circ, 150^\circ, 166^\circ$
	Total		4	