

Question	Scheme	Marks	AOs
9	Uses $\sin^2 x = 1 - \cos^2 x \Rightarrow 12(1 - \cos^2 x) + 7 \cos x - 13 = 0$	M1	3.1a
	$\Rightarrow 12 \cos^2 x - 7 \cos x + 1 = 0$	A1	1.1b
	Uses solution of quadratic to give $\cos x =$	M1	1.1b
	Uses inverse cosine on their values, giving two correct follow through values (see note)	M1	1.1b
	$\Rightarrow x = 430.5^\circ, 435.5^\circ$	A1	1.1b

(5 marks)

Notes:

M1: Uses correct identity

A1: Correct three term quadratic

M1: Solves their three term quadratic to give values for $\cos x$. (The correct answers are $\cos x = \frac{1}{3}$ or $\frac{1}{4}$ but this is not necessary for this method mark)

M1: Uses inverse cosine on their values, giving two correct follow through values - may be outside the given domain

A1: Two correct answers in the given domain