

C2 Solving Trigonometric Equations using Identities

Learn these trig identities off by heart!

$$\cos^2 \theta + \sin^2 \theta \equiv 1$$

$$\tan \theta \equiv \frac{\sin \theta}{\cos \theta}$$

Solve these equations for $0^\circ \leq x \leq 360^\circ$

	Question	Solutions
1	$2 \sin^2 x = 3 \sin x \cos x$	
2	$4 \cos x = 5 \sin x$	
3	$3 \cos^2 x - \sin x \cos x = 0$	
4	$\tan^2 x - \tan x - 2 = 0$	
5	$3 \cos^2 x - 2 \sin x - 2 = 0$	
6	$6 \sin^2 x + 7 \cos x = 8$	
7	$2 \sin^2 x + 3 \cos x - 1 = 0$	