Name _____ Date _____

Verify the following trig identities

1) $\tan(\pi/2 - x)\sin x = \cos x$	2) $\frac{\tan^2 x}{\sec x} = \sec x - \cos x$
3) $\frac{\sin x}{1+\cos x} = \frac{1-\cos x}{\sin x}$	4) sec x cot x= csc x
5) $\cos^2 x(1+\tan^2 x) = 1$	6) $\sin(\frac{\pi}{2} - x)\sec x = 1$
7) sec(-x)cot(-x)six(-x)=1	8) cos c(csc x = tan x)= cot x + sin x
Solve the following trig equations. (Show your work on another sheet of paper.)	
9) 7tanx + 9 = 2	10) $\tan x \sec x = \sqrt{2}\tan x$
11) $\sqrt{3}\sin x = 2\sin x \cos x$	12) $\sin^3 x - \sin x = 0$
13) $2\cos^2 x = 1$	14) $2\sin^2 x + \sin x = 1$