Homework for Friday

Mr. Neeman. 10B, November 9, 2011.

#1. Prove that $\sec x - \dfrac{\cot x}{\csc x} = \sin x \tan x$.

#2. Prove that $\dfrac{\sin^2 x}{\cos x} + \cos x = \sec x$.

#3. Prove that $\dfrac{\sec x}{1 + \cot^2 x} = \sin x \tan x$.

#4. Find all the solutions of $4 \sin x \cos x = -4 \cos x - \sin x - 1$, in the interval $[0, 2\pi]$, giving your answers to the nearest degree.