Trigonometry

Name:

The majority of the credit you receive will be based on the completeness and the clarity of your responses. Show all of your work and justify your solutions as much as possible. This is a 15 minute quiz and has 2 questions, for a total of 10 points

(6 points) 1. Prove that $\tan^2(\theta) - \sin^2(\theta) = \frac{\sin^4(\theta)}{\cos^2(\theta)}$ is an identity.

(5 points) 2. Show that the equation $\cos(t)(\tan(t) + \cot(t)) = -\csc(t)$ is not an identity.