Group members_____

Pass the Trigonometric Proof

Write the Pythagorean Identities
(Write one and pass it on. The next person checks previous person's work)

1.

2.

3.

Prove the Identities
(Write one step and pass it on. Then next person checks previous person's work)

1. $\dfrac{\tan^2 x + 1}{1 + \cot^2 x} = \tan^2 x$

2. $\dfrac{\sin^2 \alpha \cot^2 \alpha}{1 - \sin^2 \alpha} = 1$

3. $\cos^2 x \sin^2 x = \dfrac{\cos^2 x}{1 - \cot^2 x}$

4. $\sin \theta + \cos \theta = \dfrac{\tan \theta + 1}{\sec \theta}$

5. $\dfrac{\tan x - \tan x \sin^2 x}{2 \sin x \cos x} = \dfrac{1}{2}$

6. $\dfrac{1 + \cot x}{\csc x} = \sin x + \cos x$

CHALLENGE: As a group, write your own identity for another group to prove.