

Name : _____

Simplify

Sheet 1

Simplify each trigonometric expression using Pythagorean identities.

1) $\sin x \tan x + \cos x$

2) $\frac{-6(1 - \csc^2 x)}{\cot^2 x}$

3) $(1 + \cot^2 x) \sin x$

4) $\frac{-1 + \sec^2 x}{\sec^2 x}$

5) $\frac{\tan^2 x + 1}{\cot^2 x - \csc^2 x}$

6) $\sin^2 x - \sin^2 x \cos^2 x$