

PRE CALCULUS
SECTION 5.1- WORKSHEET
SIMPLIFYING TRIGONOMETRIC EXPRESSIONS

NAME _____ DATE _____ PER _____ ASSG _____

Show ALL steps for credit.

1) Simplify in terms of sin x: $\cot^2 x - 1$

1)

2)

3)

4)

5)

2) Simplify in terms of cos x: $\csc^2 x + \cot^2 x$

In problems 3 – 10, simplify in terms of a single trig function:

3)
$$\frac{\sin x + \tan x}{\tan x(\csc x + \cot x)}$$

4) $\frac{\cot^2 x}{\csc x + 1} + 1$

5) $\frac{(\csc x - \cot x)(\csc x + \cot x)}{\sin x}$