

## GROUP WORK I, SECTION 3.4

### The Magnificent Six

The derivative of  $f(x) = \sin x$  was derived for you in class. From this one piece of information, it is possible to figure out formulas for the derivatives of the other five trigonometric functions. Using the trigonometric identities you know, compute the following derivatives. Simplify your answers as much as possible.

1.  $(\sin x)' =$

2.  $(\cos x)' =$

3.  $(\tan x)' =$

4.  $(\sec x)' =$

5.  $(\cot x)' =$

6.  $(\csc x)' =$