

## Assignment #9-1

## Secondary 3 Honors

Precalculus Book: Pg. 357 3, 5, 6, 9, 12 (Try to use trig identities on these problems)  
51, 55, 58, 61, 62, 65

### Additional Problems:

Simplify the following expressions.

1.  $\sec x \cos x$

2.  $(1 - \cos^2 x)(\csc x)$

3.  $\sin x \sec x$

4.  $\cot x \sec x$

5.  $\cot x \sin x$

6.  $\sec^2 x (1 - \sin^2 x)$

7.  $\sec \alpha \frac{\sin \alpha}{\tan \alpha}$

8.  $\cot\left(\frac{\pi}{2} - x\right) \cos x$

Sketch each graph and label one full cycle:

9.  $f(x) = \frac{1}{2} \sin \pi x$

10.  $f(x) = \frac{1}{2} \cot\left(x + \frac{\pi}{4}\right)$

11. Find the six standard trig functions of  $\theta = \frac{3\pi}{2}$ .