

*Math 112*  
*Jonny Comes*  
*Fall 2005*  
*Assignment #6*  
*Due Wednesday Nov. 9*

**From the Textbook:**

- Section 7.5: 18-32 all, 41-48 all, 58, 60.
- Section 8.1: 1-16 all, 19-28 all, 39-46 all, 49, 50

**Additional Exercises:** (Be sure to justify all your answers)

1. True or False:

- If  $c$  is some real number, then we know the equation  $\tan x = c$  has infinitely many solutions.
- If  $c$  is some real number, then we know the equation  $\sin x = c$  has infinitely many solutions.
- If  $c$  is some real number, then we know the equation  $\sin x = c$  has either zero or infinitely many solutions.
- If  $\sec x = c$  where  $c > 1$ , then we know

$$x = \frac{1}{\arccos(c)} + 2\pi k \quad \text{or} \quad x = -\frac{1}{\arccos(c)} + 2\pi k$$

- If  $\sec x = c$  where  $c > 1$ , then we know

$$x = \arccos\left(\frac{1}{c}\right) + 2\pi k \quad \text{or} \quad x = -\arccos\left(\frac{1}{c}\right) + 2\pi k$$