

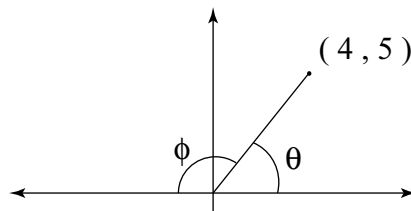
*Math 112*  
*Jonny Comes*  
*Fall 2005*  
*Assignment #3*  
*Due Wednesday Oct. 12*

**From the Textbook:**

- Section 6.5: 2-18 even, 24-34 even, 46
- Section 6.6: 2-20 even, 24-30 even, 38-42 even, 48-52 even.

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

1. Let  $f(t) = \cos(t)$  and  $g(t) = \sec(t)$ . If the point  $(a, 7)$  is on the graph of  $g$ , what is  $f(a)$  ?
2. Use the following diagram to find  $\sin(\theta)$ ,  $\sec(\theta)$ ,  $\cos(\phi)$ , and  $\cot(\phi)$ .  
[Be careful!  $\phi$  is not pictured in standard position.]



3. True/False. The graph of  $f(t) = 12 \cos(2t - 4)$  passes through the  $t$ -axis when  $t = \pi/4 + 2$ . [Just to clarify, the  $t$ -axis is what you might normally think of as the  $x$ -axis]
4. True/False. For any real number  $t$ ,  $\sin(\csc(t)) = t$ .