

*Math 251*  
*Jonny Comes*  
*Spring 2006*  
*Assignment #6*  
*Due Wed. May 10th*

**From the Textbook:**

- Section 3.4: 2, 4, 5, 6, 8, 9, 10, 18, 19, 24, 30.
- Section 3.5: 2, 3, 4, 6, 10, 12, 20, 21, 38, 41, 42, 43.
- Section 3.6: 10, 11, 12, 25, 26, 41, 42, 43, 44, 49, 50.

**Additional Exercises:**

1. Prove  $\frac{d}{dx}(\cos x) = -\sin x$  using the definition of the derivative.  
[Hint: Look at how we proved  $\frac{d}{dx}(\sin x) = \cos x$  in class.]