

*We shall not cease from exploration,  
And the end of all our exploring  
Will be to arrive where we started  
And know the place for the first time.*  
-T.S. Eliot

Honors Calculus – Math 129 – Fall 2009 – R. Pollack  
HW #6

1. Spivak, Chapter 2 – 1(i), 3(a), 3(d)  
[Read the chapter if you need more background on induction.]
2. Prove  $(x^n)' = nx^{n-1}$  directly from the definition of the derivative by using the above exercise.
3. Spivak, Chapter 6 – 2 (only do the 4-17 part of this question), 4, 5, 6
4. Spivak, Chapter 9 – 1(a), 2(a), 5,14