Reading Assignment for Section 3.3

MATH 130: Calculus I, Sections 2 and 3
Fall Semester 2013

Follow the general guidelines for the Reading Assignment (the salmon colored handout). Be sure to include and label all four standard parts a,b,c,d of the Reading Assignment in what you hand in. Be sure to **staple** together each assignment, and include your **name** and which **section** of calculus you are in at the top. Neatness is appreciated!!!

Due: at the beginning of class on Monday, October 7th

Read:

Section 3.3, pages 145-151: Product and Quotient Rules!

Notes:

This reading includes more shortcut rules! Make sure that you address all parts of each question.

Remember that your answers should include complete sentences for every question.

Reading Questions for part (a):

1. (a) Is the derivative of a product the product of the derivatives? What is the Product Rule? (b) On page 146 in our text they prove the Product Rule. Work through it and see if it makes sense. Then write down the proof filling in details, adding comments (and/or questions) that help the reader understand the process (and/or describe to me where you found it confusing).

2. Give two ways to differentiate $f(x) = (x^2 + 4)(x - 2)$. Show your work for each method clearly.

3. Give two ways to differentiate $f(x) = \dfrac{1}{x^{13}}$. Show your work for each method clearly.

Remember parts b-d on the salmon handout!