Section 3.3: Rules of Differentiation

MATH 130: Calculus I

Due: Friday, March 1, 2019 at 12:20pm   Name (Print): _____

After reading Section 3.3 (pages 152-159 in the text), respond to the following questions **on this handout**. Be sure to staple your pages together before turning it in. **You must answer all parts to all questions to earn full credit!!!** See the salmon homework guidelines handout for details. You are encouraged to take additional notes wherever you are keeping your class notes.

Response Section

1. (i) What is the Constant Rule?

    (ii) Why does this make sense? (Use terminology from our discussions on Section 3.1 and full sentences.)

2. State the Power Rule.

3. Use the Power Rule to find the derivative of $f(x) = x^{2019}$. Are you glad there is a short-cut for this derivative?

4. State both the Constant Multiple Rule and the Sum Rule.

5. State the definition of $f(x) = e^x$.

6. What is amazing about $f(x) = e^x$? (Hint: See Theorem 3.6!) WOW!

Questions/Exercises Section

7. Write down any questions you have on the reading. Be as specific as possible! See the salmon homework guidelines handout for details.

Reflection Section

8. Write down at least two questions you have on the reading. OR if you have NO questions, do exercise 70 in Section 3.3 (page 161). Read the directions! See the salmon homework guidelines handout for details.

Time Section

9. How much time did you spend on this reading assignment? _____