Section 3.1: Introducing the Derivative

MATH 130: Calculus I

Due: Monday, February 25, 2019 at 12:20pm   Name (Print): ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

After reading Section 3.1 (pages 131-137 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. Write down the Rate of Change and the Slope of the Tangent Line definition on page 133. This should look very familiar from our previous work!

2. What is the derivative the same thing as? Find two answers for this in the section and use full sentences to respond.

3. Write out the definition of the derivative of a function at a point and differentiable on the bottom of page 135.

4. Draw the graph $y = 4 - x^2$. Then draw an example of a tangent line with positive slope and a tangent line with negative slope on your graph. Label which is which. No further explanation is necessary.

5. Use the definition you stated in number 3 to do Exercise 33 on page 138.

Questions/Exercise Section

6. Write down at least two questions you have on the reading. OR if you have NO questions, do exercise 28 in Section 3.1 (page 138). Show all your work for a full solution/full credit. See the salmon homework guidelines handout for details.

Reflection Section

7. Write **two or three** sentences reflecting on the process of your recent work in the course. See the salmon homework guidelines handout for details.

Time Section

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