

Section 3.4: The Product and Quotient Rules

MATH 130: Calculus I

Due: Monday, March 4, 2019 at 12:20pm

Name (Print): _____

After reading Section 3.4 (pages 163-167 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. State the Product Rule.

2. On pages 163-164 in our text the authors prove the Product Rule. Work through it and see if it makes sense. Then write down the proof below 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).

3. Let $f(x) = (x^2 + 4)(x - 2)$. Differentiate f in two ways.

(a) Multiply out and then differentiate using rules from Section 3.3 (do your best, I know we haven't discussed this yet!).

(b) Use the Product Rule. Check to see that you get the same result as in (a).

4. State the Quotient Rule.

Questions/Exercise Section

5. Write down at least two questions you have on the reading. OR if you have NO questions, do exercise 22 in Section 3.4 (page 168). Read the directions! See the salmon homework guidelines handout for details.

Reflection Section

6. 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

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