

Section 4.7: L'Hôpital's Rule

MATH 131: Calculus II

Your Name (Print): _____

Course Section Number: _____

Due: Monday, October 28 , 2019 at the beginning of class

After reading Section 4.7 (pages 301-310 in the text), respond to the following questions **on this handout**. Be sure to staple your pages together before turning it in if they are not double sided. **You must answer all parts to all questions to earn full credit!!! Also, use FULL SENTENCES to answer questions that require words.** See the salmon homework guidelines handout for details.

Response Section

1. What does it mean for a limit to be an indeterminate form? Write a full sentence to explain. This question is interested in **WHY** the forms are called indeterminate more than what the forms are!

2. List each of the different types of indeterminate forms for limits that are discussed in this section (you should have about 4-5 categories of forms), and say briefly what approach the book says we can take for each of them, that is, what is a strategy for solving each. Feel free to also use your memory and notes from calculus I to answer this question! You should be able to be very detailed and precise since this is review!!! I will expect more in terms of correctness than in other reading assignments!

3. State l'Hôpital's Rule (Theorem 4.13).

4. What does the book say about blindly using l'Hôpital's Rule whenever we see the limit of a quotient? That is, are we always allowed to apply l'Hôpital's Rule if we are taking the limit of a quotient? Why or why not?

Questions/Exercise Section

5. Write down at least two questions you have on the reading. OR if you have NO questions, do exercise 36 in Section 4.7 (page 311). Be sure to show your work for full credit! See the salmon homework guidelines handout for details.

Reflection Section

6. Write **two or three** sentences reflecting on the progress of your work so far in the course. See the salmon homework guidelines handout for details.

Time Section

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