

Section 5.3: FUNDAMENTAL THEOREM OF CALCULUS

MATH 131: Calculus II

Your Name (Print): _____

Due: Friday, January 31, 2020 at 1:30pm

After reading Section 5.3 (pages 367-377 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. You are encouraged to take additional notes wherever you are keeping your class notes.

Response Section

1. State the definition for the Area Function.
2. Let $f(x) = 6$. Note that this means that f is a constant function. Explain why an area function for f is an increasing function regardless of the left endpoint. Including a diagram in your explanation would be helpful.
3. State the Fundamental Theorem of Calculus Part 1.

4. State the Fundamental Theorem of Calculus Part 2.

5. What is the key relationship that the Fundamental Theorem of Calculus is illustrating?

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 5.3 (page 378). Be sure to address both parts of the question asked for full credit! See the salmon homework guidelines handout for details.

Reflection Section

7. 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

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