Reading Assignment 10 (Due Monday 7/19/21 by 12:55 PM)

Basic learning objectives: These are the tasks you should be able to perform with reasonable fluency **when you arrive at our next class meeting**. Important new vocabulary words are indicated in italics.

1. Evaluate integrals of the form $\iint_R f(x,y)dA$ where R is a rectangle by setting up an appropriate iterated integral (using *Fubini's Theorem*) and then applying the Fundamental Theorem of Calculus.

Advanced learning objectives: In addition to mastering the basic objectives, here are the tasks you should be able to perform **after class, with sufficient practice:**

1. Evaluate integrals of the form $\iint_D f(x,y)dA$ where D is a not necessarily rectangular domain by setting up an appropriate iterated integral and applying the Fundamental Theorem of Calculus.

Directions: Read the following sections of the book:

- Section 11.1.3. We covered the main ideas during class.

- All of Section 11.2. I won't be lecturing on this section.

- Section 11.3.1 up to and including Example 11.3.3.

and complete the following tasks along the way. If an Activity is not listed, you do not need to complete it (although you are welcome to read it). Turn your write up in via gradescope. You do not need to write the questions down, as long as you clearly indicate the question number.

1. Preview Activity 11.2.1.

2. Activity 11.2.2.

3. Activity 11.2.3.

4. Preview Activity 11.3.1.