

# Reading Assignment for Section 6.2

MATH 131: Calculus II, Sections 2 and 3  
Fall Semester 2015

**Follow the general guidelines for the Reading Assignment (the salmon colored handout).**

Be sure to include and label all four standard parts 1,2,3,4 of the Reading Assignment in what you hand in. Be sure to **staple** together pages if you have more than one, and include your **name** at the top of at least the first page. Neatness is expected!!!

**Due:** by the beginning of class on Wednesday, September 23rd

Read:

Section 6.2, pages 412-416: Regions Between Curves! Do the Quick Checks along the way! Check your answers to them at the end of the Exercises for Section 6.2!

Notes:

What if we are interested in finding the area of a region that is not bound in part by the  $x$ -axis? What if the region is bound between two curves? In this section we learn how to find the area of regions that are bound in different ways. We will have to consider integrating with respect to  $y$  instead of  $x$  too! However, keep in mind that all the ideas in this section build off of what we started at the beginning of Chapter 5.

**Remember that your answers should include complete sentences for every question. Be sure to address all parts of each question.**

Reading Questions for part (1):

- a) How is the derivation of the formula for finding the area between two curves similar to finding the area under a curve as we did in Section 5.2? How is it different?
- b) Example 2 on pages 413-414 is a little more complicated than Example 1 on page 413. What makes it so? Explain how setting up the solution is different.
- c) Why would we want to integrate with respect to  $y$  rather than with respect to  $x$ ? Give an example, different from those in the text, to assist in explaining your reasoning.

Remember parts 2-4 on the salmon handout! **Reread the directions for these parts to be sure that you are answering the questions.** If you have lost your salmon handout, there is a link on our website to the Homework Guidelines.