

# Reading Assignment for Section 6.3

MATH 131: Calculus II, Section 1

Spring Semester 2014

**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 appreciated!!!

**Due:** by the beginning of class on Monday, February 17th

Read:

Section 6.3, pages 383-387: Volume by Slicing! Do the Quick Checks along the way! Check your answers to them at the end of the Exercises for Section 6.3!

Notes:

We have worked on finding the area under a curve and you have read about finding the area between two curves, but what if we are interested in three dimensions? How can we find the volume of an object that isn't just a cube, a sphere, a cylinder or another common solid for which we already have a straightforward formula? Amazingly, our process for building a formula is very similar to the process we have used for finding other kinds of formulas in previous sections.

**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) Describe in **your own words** what the General Slicing Method is. Do not just write down the definition. Describe the process of where the formula comes from.
- b) Why is the Disk Method a special case of the General Slicing Method?
- c) When would we use the Washer Method? Do we really need the Washer Method?

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.