Reading Assignment for Section 8.2

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, November 11th

Read:

Section 8.2, pages 607-615: Sequences. Do the Quick Checks along the way! Check your answers to them at the end of the Exercises for Section 8.2!

Notes:

Now that you have read an introduction to the chapter (Section 8.1) to get an idea what sequences and series are all about, in this section we delve deeper into what a sequence is, what properties it might have, and how we determine whether or not a sequence has these properties. Make up your own sequence and see what you can discover about it!

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) Suppose r is a constant. What kind of a sequence is $\{r^n\}$? Does the sequence $\{r^n\}$ have a limit? (Your answer should depend on what the constant r is; so describe **all** the possibilities).

b) If a sequence is known to be increasing, what else do you need to know about it to be sure it converges? (That is, what other property must the sequence have to be convergent?) Explain.

c) Do Exercise 4 in Section 8.2 on page 616 of our text. Explain why your example works.

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.