

Reading Assignment for Section 8.1

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 Monday, November 9th

Read:

Section 8.1, pages 596-604: An Overview (of Sequences and Series!). Do the Quick Checks along the way! Check your answers to them at the end of the Exercises for Section 8.1!

Notes:

This section gives a brief introduction to the topics of this chapter that will be our focus for the rest of the semester: sequences and series. Sequences and series are closely linked, but it is important to understand their differences. Why do we study these? One reason is that even with all the cool techniques we have learned, there are STILL functions that we do not know how to integrate! (Can you think of one?) Series will give us a way to attack these!

Remember that your answers should include complete sentences for every question (this time, there is an exception to this - you do not have to write sentences for c and e, but you should show your work!). Be sure to address all parts of each question.

Reading Questions for part (1):

- a) Explain in your own words what a sequence is. Give two interesting examples.
- b) Explain what it means for a sequence to have a limit.
- c) Do Exercise 2 in Section 8.1 on page 604 of our text.
- d) Explain in your own words what an infinite series is. How is it different from a sequence?
- e) Do Exercise 8 in Section 8.1 on page 604 of our text.

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.