

Reading Assignment for Section 8.2

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, April 7th

Read:

Section 8.2, pages 537-546: 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 to get an idea what sequences and series is 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 (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) Does the sequence $\{r_n\}$ have a limit? (Your answer will 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? Explain.
- c) Do Exercise 4 in Section 8.2 on page 546 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.