# Calculus III Honors Spring 2010
# Homework 4
## Not to be turned in

**Instructions:** These are some problems to help you review/prepare for the up coming exam, as well as to give you more experience with sequences which will be covered on the exam. Bring any questions you have to class on Monday, or to office hours.

## Reading/Review

Review sections 11.1–11.4 and 12.1 (up to and including p. 717). Review Homeworks 1–3.

## Problems

**Chapter 11 Review (pp. 705–707)**
*Concept Check:* 1–5
*Exercises:* 1–4, 6–8, 9, 11, 13, 15, 17, 21, 23, 24, 25, 29, 31, 33, 35, 37, 39, 40, 41, 57

**Section 12.1:** 1, 2, 4, 8, 10, 11, 17–24

**Bonus:** Find the limit $L$ of the sequence $(\frac{1}{n^2+1})$. Prove the limit actually is $L$ using the formal definition of limit (Definition 2 in the text).