

Math 305, Problem Set #10
(due **by email** Monday, 11/30/09, 10:30 a.m.)

Abbott, section 6.2, problems 5, 7, and 8. Hint for problem 5(b): Modify the definition of $f_n(x)$ by defining $f_n(x) = 1/x^2$ for $|x| \geq 1/n$ (you'll need to figure out the appropriate way of defining $f_n(x)$ for $|x| < 1/n$).

Abbott, section 6.3, problems 1(a), 4(a,b).

Abbott, section 6.4, problems 3, 6, 7.

Note: In your solution to a problem, you may appeal to the results proved on the homework in earlier problem sets or the current problem set (as long as you don't engage in circular reasoning).

Please don't forget to write down **who you worked on the assignment with** (if nobody, then write "I worked alone"), and record **how much time you spent on each problem** (this doesn't need to be exact).