Math 330 Section 3 Homework 12

Reading only! Due date: Friday, Oct.30, 2015 Running total: 39 points

Status - Reading Assignments:

Here is the status of the reading assignments you were asked to complete by this date.

Textbook: all of ch.1 - 8 (ch.7.2 was optional), ch.9, ch.10.1-10.4

Other course material (course materials page): "Logic part 1", "Sets part 1", "Sets part 2", "Functions part 1", "Functions part 2"

"Lecture Notes: Math 330 - Additional Material": All of ch.3 (understand the material) all of ch.4 (understand the proofs!) all of ch.5.1, ch.5.2 up to and including definition 5.13 (liminf and limsup of a sequence).

New reading assignments:

"Lecture Notes: Math 330 - Additional Material": All of ch.3 (understand the material) All of ch.6 (understand the material) EXCEPT ch. 6.2.2 on normed vector spaces Subchapter 7.1.1: "Measuring the distance of real functions"

You will not yet see the ch.6 material on any quiz or exam, but at some point in time I'll ask you to revisit it more carefully. For now its purpose is to build your understanding of distance functions and norms. On the other hand, be sure to study the material in ch.7.1.1 **carefully**: At a minimum you will be required to know the definition of metrics and norms and how any norm defines a metric. Do not go about this without doing the required reading of ch.6 given above: Its purpose is exactly to let you understand this part of chapter 7!