MATH 360 — HOMEWORK 3.

due on Friday, February 12.

Textbook: "Elementary Classical Analysis", second edition by J. E. Marsden and M. J. Hoffman

Additional Reading: "Foundations of Modern Analysis" by J. Dieudonné

Topics:

- Introduction: Sets and Functions
- 1 The real Line and Euclidian Space
 - 1.1 Ordered Fields and the Number System
 - 1.2 Completeness and the Real Number System

Third Homework Assignment.

Reading:

• Read Section 1.1 paying attention to all the examples.

Exercises:

Problem 1. Write down the proof of Theorem 1.2.7 (page 39).

Problems:

- Page 20: problems: 15
- Page 35: problems: 3,5
- Page 45: problems: 3,4
- Page 97: problems: 2, 34, 35, 36.

The topics and page numbers are from the textbook..