MA 440, Homework 1, Due January 20, 2017

For the first few weeks I'll assign review problems on material I'd normally expect to have been covered in MA 341 or 440 as well as problems from current material.

You'll need to read the definitions in the relevant sections.

- (1) Basic Concepts of Mathematics: Page 9, #10(a)(c).
- (2) Basic Concepts of Mathematics: Page 62, #5(i)(iv).
- (3) Basic Concepts of Mathematics: Page 83, #7(i)(ii)
- (4) Mathematical Analysis I: Page 98, #5, 6, 9(i), 10(i), 11.
- (5) Mathematical Analysis I: Page 106, #1, 2, 3, 11, 12.

When solving a problem something you can use any

- (1) Definitions
- (2) Axioms
- (3) Theorems, Lemmas, and Corollaries, and
- (4) Problems (whether assigned or not)

that are either in the book or done in class that come **before** the problem you're working on.