Math 112 homework #3. Due 10/17

I mean the word 'proof' not in the sense of the lawyers, who set two half proofs equal to a whole one, but in the sense of a mathematician, where a half proof = 0, and it is demanded for proof that every doubt becomes impossible.

- C. F. Gauss (mathematician, 1777-1855)

(1) Read chapter 2 of the course notes, reviewing the material we covered in class.

(2) Do the following exercises from pages 86-90 of the course notes.
Remember when you give a proof of something you must justify each step by indicating which axiom or result you are using.
- 2.1
- 2.2
- 2.7
- 2.10 part a) (we'll talk about orders on Friday in class)

(3) In one or two paragraphs, answer either question 2 or 3 (your choice) from the page of questions at the back of the reading on axioms. Your tutor will appreciate if you write thoughtfully and *legibly*.

(4) Don't forget to study for your midterm!