Math 310 B & C Introduction to Mathematical Reasoning Autumn 2005 Assignment #10 Due FRIDAY, 12/9/05

Reading

• Chapters 21 (again), 22.

Short Answers

For the following problems, give answers only; no proofs or reasons are necessary (even if the book asks for them).

- Pages 266–269, Problem 21.11.
- Pages 280–282, Problem 22.2.

Long Answers

For each of the following problems, give a careful proof of every assertion you make.

- Pages 258–260, Problems 20.7, 20.9.
- Pages 266–269, Problems 21.10, 21.15, 21.16(a,b).
- Pages 280–282, Problem 22.5.

For Fun and Practice

These need not be handed in; but if you want to hand them in with your Long Answers, I'll look at them.

- Pages 280–282, Problem 22.3.
- Prove that the sets $(0, \infty)$ and $[0, \infty)$ are equivalent.