

Math 310 B & C      Introduction to Mathematical Reasoning      Autumn 2005  
ASSIGNMENT #8  
DUE 11/23/05

**Reminders about Portfolio Problems:**

- Second draft of Portfolio Problems 2 and 3 is due Monday 11/21 (one draft per group). Bring one copy to class on Monday.
- Read handout #5 about Portfolio Problem 4, and choose a topic as soon as possible. I recommend deciding on a topic no later than Monday 11/21. If you have questions about this assignment, I'll answer them in class on Friday, 11/18.

**Reading**

- Chapters 15 (again), 16 (again), 17.

**Short Answers**

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

- Pages 170–173, Problems 14.5, 14.8 (just say whether each function is one-to-one).
- Pages 184–189, Problems 15.1, 15.5, 15.6.

**Long Answers**

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

- Pages 170–173, Problem 14.7.
- Pages 184–189, Problem 15.8, 15.11, 15.16.

**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 184–189, Problems 15.9, 15.13.