

**Math 101!**  
**October 16, 2001**

**Announcements:**

Friendly advice reminders: Form study groups but write up solutions yourself and credit your sources; Start problems sets early so you have a chance to think about them; When critiquing, mention what you like about your classmate's style or solutions along with commenting on what you do not believe and why; Try not to get behind; It is much better to hand in something than nothing; Don't hesitate to ask for help; Go over your problem sets and comments when they are returned; And if you find some of the activities engaging, write them up since you are supposed to hand in three eventually. Note also that, as it says on the syllabus, there will be one midterm in class, probably November 15.

**Reading:**

Keep working on Chapter Three of the Notes (N3) as posted on the website. Look though Chapter §W6 on relations. Don't worry about domains and ranges yet. Review §W8.1 and study the end of §W8.3 (pp.286-9) as an example of a quotient. In §W9.5, see the construction of the rationals on pp. 340-3.

**Problem Set:**

- A. In Wolf, §W6.1: #4 and §W6.2: #2(a,d,e); #4(do any 3) and §W6.3 #16 and #20.
- B. In Wolf, §W8.3: #12.
- C. In Wolf, §W9.5 #1 and #14 just for the case  $n=5$ .

**Activities:**

(Talk about these questions in section or on the website's discussion section.)

- A. The Priestley Appendix distributed in class about Mathematical Writing deals mostly with examples from calculus. Imagine writing a similar piece about writing in this class and come up with some illustrations you could use from our assignments.
- B. Keep passing around and playing with the program Tarski's World on that CD.
- C. More on relations in Wolf, §W6.2: #1 (make up more examples, too), #18, and #19.
- D. Using ring axioms in Wolf, §W8.1: #1, #17 (compare with Appendix 2).