Math 541
Modern Algebra
A first course in Abstract Algebra
Lecturer: Arun Ram

Fall 2007

University of Wisconsin-Madison
Mathematics Department

Homework 4: Due October 3, 2007

1. Make a detailed outline of the course so far.

2. Make up a 75min Midterm 1 for this course.

3. Make a list of all vocabulary so far in this class.

4. What is the correct grammar for a definition and why? for a noun? for an adjective? for a condition in a definition? Give appropriate examples.

5. Write the definition of each term 3 times.

6. What are the examples which have appeared so far in this course?

7. Give and example and a non example for each definition term.

8. What are the theorems/facts in the course so far?

9. How does proof machine work? What are the words which appear in a proof?

10. What are the types of proofs? For each type of proof, what is its structure?

11. Write a proof machine proof of each theorem/fact which we've had so far in this course. Do each one at least twice.