

## Math 392: Homework 4 (due W February 13)

**Part I: reading.** Read sections 9.1 and 9.2. Try to learn for yourself the definitions of “Euclidean domain”, “Principal ideal domain” and “Unique factorization domain”. Try to really understand the proofs “ED  $\Rightarrow$  PID” and “PID  $\Rightarrow$  UDF”.

**Part II: questions from the book.**

Exercises 9.1: 1,2,3,4,6,11(a),14.

Exercises 9.2: 4.