## Algebra I, Fall 2015, Homework 4

Due: Thursday, November 12, in class.

## Problems from Basic Algebra 1:

**2.7:** 10

**2.10:** 2

**2.11:** 2, 5

**2.14:** 7

Hint: One can use that 2 is not a square modulo 10 to prove that 2 is an irreducible element of  $\mathbb{Z}[\sqrt{10}]$ .

**2.15:** 2

**2.16:** 1, 2, 3

**3.4:** 4

**3.5:** 3, 5