### Math 4460

#### **Test 2 Study Guide**

#### Test 2 covers:

- HW 3
- HW 4
- Problems 1,2,3 from HW 5. (The rest of HW 5 will be on the final.)

Test 2 will have computations from the above.

There will also be proofs directly from the HW on the test.

## Computations to know:

- HW 4 Problems 1, 3, 4, 5, 6, 7
- HW 5 Problems 1, 2, 3

Some particularly good proofs to know are the following:

# HW 3 proofs to know -

- Showing a real number is irrational. See problems 1, 2, 3.
- Prime factorization problems. Problems 5, 6, 7 are good ones.
- Do problems 4 and 8 if you want extra extra practice.
- Don't worry about problem 9.

## HW 4 proofs to know –

- Proofs with mod. See problems 2, 8, 9, 10, 11.
- Showing an equation has no integer solutions. See problems 13, 14.
- Showing a formula isn't divisible by a number. See problem 12.
- Don't worry about problems 15 and 16 and 17. Do if you want extra extra practice.