

## Math 4460 - Test 1 Study Guide

Test 1 covers:

HW 1, HW 2

There will be at least one proof directly from the HW on the test.

The computations will be similar to homework computations.

Computations to know:

- Calculating the GCD  
HW 2 - #1, 2
- Euclidean algorithm to calculate the GCD  
Definitely know this  
HW 2 - #3
- Euclidean algorithm to solve  $ax + by = c$   
Definitely know this  
HW 2 - # 4

Proofs:

Some particularly good proofs to know are below.

- Division proofs  
HW 1 - # 1, 2, 3, 4, 5, 6, 8, 12
- Composite / primes  
HW 1 - # 7, 10
- GCD  
HW 2 - # 5, 6, 7, 8, 9, 10, 11, 12, 13