Math 134 — Homework #5

Due May 5, 2016

• Read section 3.12 in the book (presumably you already did this when studying for the midterm).

• Chapter 3, #22, #36, #37, #38

  1. Let $n$ be divisible by two distinct odd primes. Show that $(\mathbb{Z}/n\mathbb{Z})^*$ is not cyclic.
  2. Let $n$ be divisible by 4 and by an odd prime. Show that $(\mathbb{Z}/n\mathbb{Z})^*$ is not cyclic.

• Chapter 6, #16, #17, #19, #27