Problem Set 6 Due: 9:00 a.m. on Wednesday, February 24

Instructions: Carefully read Section 2.8 of the textbook. Submit your solutions to the following problems. Be sure to adhere to the expectations outlined on the sheet *Guidelines for Problem Sets.* Submit your solutions in-class or to Dr. Cooper's mailbox in the Department of Mathematics.

Exercises: From pages 107–115 of the textbook.

- 1. Let a, b, and c be positive integers such that gcd(a, b) = 1 and gcd(a, c) = 1. Prove that gcd(a, bc) = 1.
- 2. Section 2.8 #2.21, page 111