

ECE Information and Network Security
Homework 1
Spring 2006

Problems from the Book:

Chapter 2: 1, 2, 6, 9, 23

Chapter 2, Computer Problems: 2, 6 (Note: The book's webpage has Matlab code that might be useful).

Chapter 3: 1, 5, 6

Supplemental Problems:

1. Suppose that $n = 7 \cdot 11$, write out all the numbers a such that $\gcd(a, n) = 1$. Do you see a pattern? Can you extend this observation to more general $n = pq$ where p and q are prime numbers?