## HOMEWORK 2

## DUE 24 JANUARY 2013

- 1. Problem 1, Section 5.3 from the textbook.
- 2. Problem 4, Section 5.3 from the textbook.
- **3.** Problem 5ab, Section 5.3 from the textbook.
- 4. Compute the following Legendre symbols.

(a) 
$$\left(\frac{2819}{4177}\right)$$
  
(b)  $\left(\frac{2896}{4177}\right)$ 

- 5. Determine whether the integer A is a quadratic residue or nonresidue modulo p for the following integers.
  - (a) A = 500, p = 4219.
  - (b) A = 2003, p = 2011.
  - (c) A = 1903, p = 2011.