

**Instructions**

- Answer each question completely; justify your answers.
  - This assignment is due at: 5:00 pm on Wednesday November 22nd.
1. Exercise 4.24.
  2. Exercise 5.1, parts (k) to (m)
  3. Exercise 5.5.
  4. Exercise 5.8.
  5. Exercise 5.10.
  6. Exercise 6.1.
  7. Exercise 6.2.
  8. Exercise 6.8.
  9. Exercise 6.11.
  10. Exercise 6.13.
  11. Suppose that Bob uses the RSA cryptosystem, and has published his  $n = 28321$  and  $e = 2543$ . Bob receives an encrypted message  $C = 4682$  from Alice. Decrypt this message.