

## CMSC/MATH 456, Fall 2008

Homework 7, due at the beginning of class on December 2nd

**Instructions.** The homework should be your own work, without any collaboration or consulting sources such as the Web. Please include partial solutions if you cannot fully solve a problem. Neatly write your solutions and staple your work; late homework will not be accepted. *All problems below are the numbered exercises given in the textbook.*

0. Read and understand Section 7.3.1 and Appendices B.2.1, B.2.2 and B.2.3; we will also cover these quickly in class. You are not required to understand the details of algorithm eGCD (of Appendix B.1.2, which is used as a black-box in Appendix B.2.2), but are encouraged to do so if you can. **(0 points)**

1. Exercise 7.11. **(15 points)**

2. Exercise 7.13. **(5 points)**

3. Exercise 7.14. **(5 points)**

4. Exercise 7.16. **(5 points)**

5. Exercise 7.20. **(5 points)**

6. Exercise 9.1. **(10 points)**