

CMSC/MATH 456, Fall 2009

Homework 2, due at the beginning of class on September 28th

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.*

1. Exercise 3.1. **(10 points)**
2. Exercise 3.2. **(5 points)**
3. Exercise 3.3. **(10 points)**
4. Exercise 3.4. **(5 points)**
5. Exercise 3.5. (Note that since this is an equivalence, you need to prove that Definition 3.8 implies Definition 3.9, and vice versa.) **(10 points)**
6. Exercise 3.6. **(10 points)**