CSCI 1323 (Discrete Structures), Spring 2013
Homework 6

Credit: 20 points.

1 Reading

Be sure you have read sections 3.1 through 3.5 of the textbook.

2 Problems

Do the following problems. You do not need to turn in answers for the ones marked "Not to turn in". Most such problems will be those for which the textbook provides an answer in the back of the book, so you can check your work.

1. (Not to turn in.) Do problem 39, all starred parts, on p. 206 of the textbook. *Also* find $\mathscr{P}(C)$.
2. (Not to turn in.) Do problem 11 on p. 220 of the textbook.
3. (Not to turn in.) Do problem 18 on p. 221 of the textbook.
4. (5 points) Do problem 19 on p. 221 of the textbook.
5. (Not to turn in.) Do problem 32 on p. 222 of the textbook.
6. (Not to turn in.) Do problem 48 on p. 222 of the textbook.
7. (5 points) Do problem 51 on p. 223 of the textbook.
8. (Not to turn in.) Do problem 19 on p. 232 of the textbook.
9. (5 points) Do problem 23 on p. 233 of the textbook.
10. (Not to turn in.) Do problem 18 on p. 247 of the textbook.
11. (Not to turn in.) Do problem 19 on p. 247 of the textbook.
12. (Not to turn in.) Do problem 48 on p. 248 of the textbook.
13. (Not to turn in.) Do problem 67 on p. 249 of the textbook.
14. (5 points) Do problem 68 on p. 249 of the textbook.
15. (Up to 5 extra-credit points.) Do any or all of problems 40 through 42 on p. 263 of the textbook. You will probably find it helpful to first do problem 39 and review the answer in the back of the textbook. For problem 42 you could even write a program that computes, for any non-negative N, the probability that a group of N people contains two people with the same birthday. If you do, you can turn it in (by sending the source code to me by e-mail) for additional extra-credit points.
16. (Up to 5 extra-credit points.) Do problem 66 on p. 265 of the textbook. You may find it helpful to first do problem 65 and review the answer in the back of the textbook.