## CSCI 1323 (Discrete Structures), Spring 2005 Homework 6

Assigned: March 30, 2005.

**Due:** April 15, 2005, at 5pm.

Credit: 40 points.

## 1 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.

If you are covered by the Academic Honor Code, treat this assignment as pledged work (writing "pledged" and your name on what you turn in).

- 1. (Not to turn in.) Do problem 11, parts (a) through (f), on p. 179 of the textbook.
- 2. (Not to turn in.) Do problem 22 on p. 181 of the textbook.
- 3. (Not to turn in.) Do problem 38, parts (a) through (c) and (h), on p. 182 of the textbook.
- 4. (4 points) Do problem 38, all unstarred parts (i.e., all parts except the ones done in the preceding problem), on p. 182 of the textbook. Also find  $\mathcal{P}(C)$ .
- 5. (Not to turn in.) Do problem 11 on p. 197 of the textbook.
- 6. (3 points) Do problem 20 on p. 198 of the textbook.
- 7. (Not to turn in.) Do problem 25 on p. 198 of the textbook.
- 8. (Not to turn in.) Do problem 70 on p. 200 of the textbook.
- 9. (Not to turn in.) Do problem 8 on p. 208 of the textbook.
- 10. (3 points) Do problem 10 on p. 208 of the textbook. (Hint: You will probably have to do some arithmetic to answer this one.)
- 11. (Not to turn in.) Do problem 14 on p. 208 of the textbook.
- 12. (3 points) Do problem 18 on p. 209 of the textbook.
- 13. (2 points) Do problem 1, part (d), on p. 217 of the textbook. (For this problem, simplify as much as you can.)
- 14. (Not to turn in.) Do problem 5 on p. 217 of the textbook.
- 15. (2 points) Do problem 8 on p. 218 of the textbook.
- 16. (2 points) Do problem 14, part (d), on p. 218 of the textbook. (For this problem, simplify as much as you can.)

- 17. (Not to turn in.) Do problem 18 on p. 218 of the textbook.
- 18. (Not to turn in.) Do problem 23 on p. 218 of the textbook.
- 19. (Not to turn in.) Do problem 43 on p. 219 of the textbook.
- 20. (3 points) Do problem 44 on p. 219 of the textbook.
- 21. (Not to turn in.) Do problem 48 on p. 219 of the textbook.
- 22. (Not to turn in.) Do problem 53 on p. 220 of the textbook.
- 23. (Not to turn in.) Do problem 59 on p. 220 of the textbook.
- 24. (Not to turn in.) Do problem 67 on p. 220 of the textbook.
- 25. (3 points) Do problem 68 on p. 220 of the textbook.
- 26. (Not to turn in.) Do problem 9 on p. 232 of the textbook.
- 27. (3 points) Do problem 11 on p. 232 of the textbook.
- 28. (Not to turn in.) Do problem 26 on p. 233 of the textbook.
- 29. (3 points) Do problem 30 on p. 233 of the textbook.
- 30. (Not to turn in.) Do problem 40 on p. 234 of the textbook.
- 31. (3 points) Do problem 41 on p. 234 of the textbook.
- 32. (3 points) Do problem 42 on p. 234 of the textbook.
- 33. (Not to turn in.) Do problem 55 on p. 236 of the textbook.
- 34. (3 points) Do problem 56 on p. 236 of the textbook.