

# CSCI 1323 (Discrete Structures), Spring 2006

## Homework 9

**Assigned:** April 22, 2006.

**Due:** April 28, 2006, 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 1 on p. 262 of the textbook.
2. (3 points) Do problem 2, parts (b) and (d), on p. 262 of the textbook.
3. (3 points) Do problem 18 on p. 264 of the textbook.
4. (Not to turn in.) Do problem 38 on p. 269 of the textbook.
5. (4 points) Do problem 40 on p. 269 of the textbook.
6. (4 points) Do problem 8 on p. 277 of the textbook.
7. (Not to turn in.) Do problem 8, parts (a) through (f), on p. 313 of the textbook.
8. (3 points) Do problem 9, on p. 313 of the textbook.
9. (3 points) Do problem 59 on p. 320 of the textbook.
10. (3 points) Do problem 2 on p. 362 of the textbook.
11. (Not to turn in.) Do problem 7 on p. 362 of the textbook.
12. (3 points) Do problem 8 on p. 362 of the textbook.
13. (3 points) Do problem 32 on p. 365 of the textbook.
14. (3 points) Do problem 47 on p. 367 of the textbook.
15. (Not to turn in.) Do problem 66 on p. 368 of the textbook.
16. (4 points) Do problem 32 on p. 385 of the textbook. (Use the textbook’s definition of height — maximum number of “hops” from root to leaf, which would mean that a tree with only a root node would have height 0.)
17. (Not to turn in.) Do problem 38 on p. 385 of the textbook.

18. (4 points) Do problem 39 on p. 385 of the textbook. (Use the textbook's definition of height — maximum number of “hops” from root to leaf, which would mean that a tree with only a root node would have height 0.)