

# CSCI 1323 (Discrete Structures), Spring 2004

## Homework 5

**Assigned:** February 27, 2004.

**Due:** March 5, 2004, *at classtime. Not accepted late.*

**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.

1. (Not to turn in.) Do problem 7 on p. 140 of the textbook.
2. (Not to turn in.) Do problem 34 on p. 142 of the textbook.
3. (4 points) Do problem 35 on p. 142 of the textbook.
4. (Not to turn in.) Do problem 40 on p. 143 of the textbook.
5. (4 points) Do problem 41 on p. 143 of the textbook. For every string of symbols that belongs to  $W$ , show how it can be generated by using the recursive definition of  $W$ . (See Example 33 and Practice 14 on p. 124 for examples of how to show that a string fits a recursive definition.)
6. (Not to turn in.) Do problem 46 on p. 143 of the textbook.
7. (4 points) Do problem 47 on p. 143 of the textbook.
8. (Not to turn in.) Do problem 64 on p. 145 of the textbook.
9. (4 points) Do problem 65 on p. 145 of the textbook.
10. (Not to turn in.) Do problem 73 on p. 146 of the textbook.
11. (4 points) Do problem 77 on p. 146 of the textbook.
12. (Not to turn in.) Do problem 79 on p. 146 of the textbook.
13. (Not to turn in.) Do problem 82 on p. 146 of the textbook.
14. (4 points) Do problem 81 on p. 146 of the textbook.
15. (Not to turn in.) Do problem 7 on p. 155 of the textbook.
16. (4 points) Do problem 8 on p. 155 of the textbook.
17. (Not to turn in.) Do problem 10 on p. 155 of the textbook.
18. (4 points) Do problem 11 on p. 155 of the textbook.

19. (4 points) Do problem 12 on p. 155 of the textbook.
20. (Not to turn in.) Do problem 13 on p. 156 of the textbook.
21. (Not to turn in.) Do problem 14 on p. 156 of the textbook.
22. (Not to turn in.) Do problem 15 on p. 156 of the textbook.
23. (4 points) Do problem 16 on p. 156 of the textbook.
24. (Not to turn in.) Do problem 17 on p. 156 of the textbook.