

# CSCI 1323 (Discrete Structures), Spring 2012

## Homework 3

**Credit:** 30 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 14 on p. 98 of the textbook. (You may use the result of any previous problem in this section.)
2. (Not to turn in.) Do problem 21 on p. 99 of the textbook. (You may use the result of any previous problem in this section.)
3. (Not to turn in.) Do problem 32 on p. 99 of the textbook. (You may use the result of any previous problem in this section.)
4. (5 points) Do problem 33 on p. 99 of the textbook. (You may use the result of any previous problem in this section.)
5. (5 points) Do problem 34 on p. 99 of the textbook.
6. (Not to turn in.) Do problem 41 on p. 99 of the textbook. (You may use the result of any previous problem in this section.)
7. (Not to turn in.) Do problem 50 on p. 90 of the textbook. Notice that this is a “prove or disprove” problem (the line that says so is on the preceding page). (You may use the result of any previous problem in this section.)
8. (Not to turn in.) Do problem 58 on p. 99 of the textbook. Notice that this is a “prove or disprove” problem (the line that says so is on the preceding page). (You may use the result of any previous problem in this section.)
9. (5 points) Do problem 64 on p. 100 of the textbook. Notice that this is a “prove or disprove” problem (the line that says so is on the preceding page). (You may use the result of any previous problem in this section.)
10. (Not to turn in.) Do problem 5 on p. 112 of the textbook.
11. (5 points) Do problem 12 on p. 112 of the textbook.
12. (Not to turn in.) Do problem 33 on p. 114 of the textbook.
13. (5 points) Do problem 35 on p. 114 of the textbook.
14. (Not to turn in.) Do problem 63 on p. 115 of the textbook.
15. (Not to turn in.) Do problem 68 on p. 116 of the textbook.
16. (5 points) Do problem 70 on p. 117 of the textbook. (*Hint: See problem 69 and its solution.*)