CSCI 1323 (Discrete Structures), Spring 2004 Homework 7

Assigned: April 14, 2004.

Due: April 23, 2004, at 5pm.

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 1 on p. 262 of the textbook.
- 2. (3 points) Do problem 2, parts (b) and (d), on p. 262 of the textbook.
- 3. (Not to turn in.) Do problem 10, parts (a) and (b), on p. 263 of the textbook.
- 4. (3 points) Do problem 10, part (e), on p. 263 of the textbook.
- 5. (Not to turn in.) Do problem 15 on p. 264 of the textbook.
- 6. (3 points) Do problem 18 on p. 264 of the textbook.
- 7. (Not to turn in.) Do problem 20, part (b), on p. 265 of the textbook.
- 8. (3 points) Do problem 21 on p. 265 of the textbook, but only for part (b) of problem 20.
- 9. (Not to turn in.) Do problem 33, parts (a) and (b), on p. 269 of the textbook.
- 10. (3 points) Do problem 40 on p. 269 of the textbook.
- 11. (Not to turn in.) Do problem 7 on p. 277 of the textbook. (This problem uses the same input as problem 2, but you should be able to complete it without doing problem 2, using the textbook's solution to problem 2.)
- 12. (Not to turn in.) Do problem 8, parts (a) through (f), on p. 313 of the textbook.
- 13. (3 points) Do problem 9, on p. 313 of the textbook.
- 14. (Not to turn in.) Do problem 28 on p. 315 of the textbook.
- 15. (3 points) Do problem 30, part (a), on p. 315 of the textbook.
- 16. (3 points) Do problem 59 on p. 320 of the textbook.
- 17. (Not to turn in.) Do problem 60 on p. 320 of the textbook.
- 18. (Not to turn in.) Do problem 5, parts (a), (e), (i), and (m), on p. 329 of the textbook.

- 19. (3 points) Do problem 5, parts (f) and (h), on p. 329 of the textbook.
- 20. (3 points) Do problem 6, parts (a) and (b), on p. 330 of the textbook. (Notice that the results, and the results of parts (c) and (d), should give you some clues about how matrix multiplication compares to integer multiplication with regard to properties such as commutativity and associativity.)