CSCI 1323 (Discrete Structures), Spring 2001

Homework 10

Assigned: March 1, 2001.

Due: March 8, 2001, at the start of class.

Credit: 20 points.

1   Problems

1. (6 points)   Do problem 17 on p. 138 of the textbook. Use the first principle of mathematical induction. Be sure to identify the base case(s) and, in the inductive step, the inductive hypothesis and what is to be proved.

2. (6 points)   Do problem 22 on p. 138 of the textbook. Use the second principle of mathematical induction. Be sure to identify the base case(s) and, in the inductive step, the inductive hypothesis and what is to be proved.

3. (4 points)   Do problem 31 on p. 140 of the textbook.

4. (4 points)   Do problem 35 on p. 140 of the textbook.