CSCI 1323 (Discrete Structures), Spring 2001
Homework 13

Assigned: March 8, 2001.

Due: March 22, 2001.

Credit: Not for credit.

1 Problems

1. Do problem 1 on p. 152 of the textbook.

2. Do problem 2 on p. 152 of the textbook.

3. Do problem 3 on p. 153 of the textbook.

4. Do problem 5 on p. 153 of the textbook. The recurrence relation should state that it holds only for n such that $n > 1$ and n is a power of 2. You may prefer to write the recurrence relation and basis step in the form used in class:

$$
\begin{aligned}
P(2^0) &= 1 \\
P(2^n) &= 2P(2^{(n-1)}) + 3, \text{ for } n > 0
\end{aligned}
$$

   (*Hint:* You may find the result of Example 15 on p. 99 useful.)

5. Do problem 11 on p. 154 of the textbook.

6. Do problem 13 on p. 154 of the textbook.