Homework 2

Handed out: 9/7/06
Due: 9/12/06

1. The PCR techniques leads to three types of molecules being present in the solution:
   - the initial DNA molecule (2 individual strands)
   - molecules terminated at one end by a primer
   - molecules terminated at both ends by a primer(the DNA we are trying to amplify)

How many of each type of molecule are present in the mix after the k-th denaturing step. Either provide a close-form equation for each type of molecule, or give the numbers for $k = 5$ and $k = 6$.

2. Problem 1 from Chapter 1 of Gusfield textbook.

3. Problem 10 from Chapter 1 of Gusfield textbook.