

# CS 3500: Introduction to the Theory of Computation

## Problem Set 2

Due May 30, 2003

### Problem 1 [20 Points]

Problem 1.23 on page 88 of Sipser.

### Problem 2 [30 Points]

Exercise 2.4 parts (a) - (f) on page 120 of Sipser.

### Problem 3 [10 Points]

Exercise 2.7 parts (a) and (d) on page 120 of Sipser.

### Problem 4 [20 Points]

Problem 2.17 on page 121 of Sipser.

### Problem 5 [20 Points]

Problem 2.18 on page 121 of Sipser.