CS 3500 Section C, Fall 2000

Homework 6 – due Wednesday, Oct. 4

Problem 1 Problem 3.2, page 147 of *Sipser*.

Problem 2 Give the complete description (transition diagram or transition table) of a deterministic Turing machine recognizing the language

$$\{w \in \{0,1\}^* \mid w \text{ has an equal number of 0's and 1's}\}.$$

Is your machine *deciding* the language?

Problem 3 Problem 3.6, page 148 of *Sipser*.

Problem 4 Problem 3.13, page 149 of *Sipser*.

Problem 5 Problem 3.16, page 149 of *Sipser*.