6.045J/18.400J: Automata, Computability and Complexity Prof. Ron Rivest

Homework 2

Due: 20 February 2002

Problem 1: Problem 1.4 (page 84) parts a, b, g, i, j

Problem 2: Problem 1.6, part a. Do this problem twice, once producing a NFA via the construction of Theorem 1.22, and again producing a DFA via the cross-product construction from class.

Problem 3: Problem 1.7, part a

Problem 4: Problem 1.8 (page 85), part b

Problem 5: Problem 1.12

Problem 6: Problem 1.31 (page 89)