

Introduction to the Theory of Computation

Homework 7

Due 11/21/2017

These are exercises

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Problem 0: Readings

Read Chapter 5 in Sipser's book.

Problem 1

Do **Problems** 4.12, 4.16, and 4.17 in Chapter 4. For problem 4.16 show that if two DFAs M_1 and M_2 disagree on some string w , then the smallest such string must satisfy $|w| \leq |Q_{M_1}| |Q_{M_2}|$. For problem 4.17, think of y as an integer.

Problem 2

Do **exercises** 5.1, 5.2, 5.4, and 5.7 in Chapter 5.