

COM S 381 Homework 2
Due date: Tuesday, May 29

Problem 1. Prove that any dfa accepting the language

$$L = \{a^{10n} \mid n \in \mathbb{N}\}$$

must have at least 10 states.

Problem 2. Do exercise **2.5.2**.

Problem 3. Do part c) of exercise **2.5.3**.

Problem 4. Do exercise **3.2.3**.

Problem 5. Do parts b) and c) of exercise **3.2.4**.

Problem 6. Do parts b) and d) of exercise **3.4.2**.