COMP 272 Theory of Computation
Spring Semester 1997
Homework 2 Due February 27, 1997

1. Given alphabet $\Sigma = \{0, 1\}$, draw a DFA that accepts 1000110.

2. Construct DFAs accepting

   (a) $\{w \in \{a, b\}^* \ : \ w$ has an odd number of a-s and an even number of b-s$\}$

   (b) $\{w \in \{a, b\}^* \ : \ w$ contains aaa and $bb\}$

   (c) $\{w \in \{a, b\}^* \ : \ w$ contains aab and $bb\}$

3. Problem 2.1.2 in Lewis and Papadimitriou.