

Last Name = _____ First Name = _____ ONID Login = _____

1. (1 pt) Prove that the language $L = \{ 0w1 \mid w \in \{0,1\}^* \}$ is regular.
2. (2 pts) Construct a DFA for the set of bitstrings that do *not* end in 0100.
3. (2 pts) Construct a DFA for the set of non-negative binary numbers that are divisible by 4.
 - (a) using 4 states
 - (b) using 3 states; if impossible please explain.