ComSS 331 Fall 2017 Name:_____

HW 4 Due: 22 sep 2017

1. Use the pumping lemma to prove that $L = \{ww : w \in \{0, 1\}^*\}$ is nonregular.

2. Prove that $L = \{w \in \{a, b\}^* : |w|_a \neq |w|_b\}$ is nonregular.