CSCI 361: Exercise # 5

Your Name: _____

Due: Tuesday, Sept 23, in class

Assigned reading for this lecture:
- Sipser Ch 1.4

Question: Consider the statement of the pumping lemma in Theorem 1.70 and answer True/False to the following questions. No justification is required.

- If a language is regular, then it satisfies the conditions of the pumping lemma.

- If a language is not regular, it is possible for it to satisfy the conditions of the pumping lemma.

- All subsets of a regular language are regular.

- Consider a L for which the $\equiv_L$ partitions Σ^* into finitely many equivalence classes. Then there exists a number p such that all strings in L of length at least p must satisfy all three conditions of the pumping lemma.