

**600.271 Automata & Computation Theory**  
**Assignment 1**  
**Due February 7, 2013**

I. Problem Set 2, Problem 1 (page 45) -  $L_1, L_4, L_{11}, L_{20}$ .

II. Problem Set 2, Problem 7 (page 46) -  $L_1, L_8, L_{19}$ . (By the right congruence lemma only. The pairs of numbers associated with the problems represent the difficulty of the problems; ignore them.)

III. Prove that the following language is not an fa language by the right congruence lemma.

$$\{ab^n a^{2n} \mid n \geq 1\}$$