

CSE 322: Introduction to Formal Models in Computer Science  
Assignment #4  
February 4, 2002  
due: Monday, February 11

1. Use closure under intersection to prove that the language

$$A = \{0^n 1^n 2^m \mid m, n \geq 0\}$$

is not regular.

2. Exercise 1.17(c).
3. Problem 1.23(c).
4. Prove that  $L = \{a^m b^n \mid m \text{ is a multiple of } n\}$  is not regular.