CMSC 22610 **Winter 2005**	**Implementation** **of** **Computer Languages**	**Homework 2** **Due January 20**

1. Write regular expressions for the following languages:
   (a) Strings over the alphabet $\{a, b, c\}$ with an even number of bs.
   (b) Strings over the alphabet $\{a, b, c\}$ where the first a precedes any occurrence of b.
   (c) Strings over the alphabet $\{0, 1\}$ that represent odd binary integers.
2. (a)-(c) Draw the finite state machines (NFAs) for the languages in 1(a)-(c).
3. Draw the NFA for $a((b|a^*c)x)^*|x^*a$.
4. Convert the following NFA to a DFA: