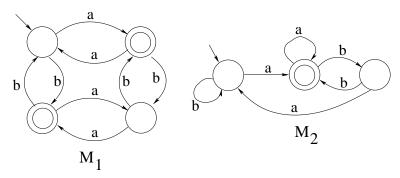
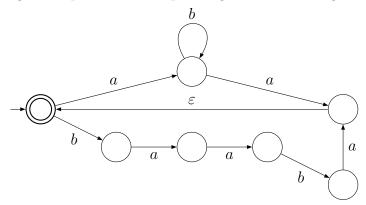


 $\mathbf{1}.M_1$ and M_2 recognize languages L_1 and L_2 , respectively. Draw a NFA that will recognize $L_2L_1^*$.



- **2**. Draw a DFA equivalent to the regular expression $0 + 10^* + 01^*0$
- **3**. Find regular expressions corresponding to each of the following subsets of $\{0,1\}^*$.
 - (a) The language of all strings that do not end with 01.
 - (b) The language of all strings in which the number of 0's is even.
- 4. Find a regular expression corresponding to the following NFA:



- **5**. (a) 1.6(b) in Sipser
 - (b) 1.7(b) in Sipser
 - (c) 1.8(b) in Sipser
- **6**. 1.14(b) in Sipser
- **7**. 1.16(b) in Sipser.
- 8. Draw the minimal DFA equivalent to the following DFA.

