1. For each of the following Transition Graphs below, convert them to Regular Expressions using the Bypass Algorithm

(a)

(b)

2. Given $FA_1$ and $FA_2$ below, construct Finite Automaton for:
   (a) $FA_1 + FA_2$   (b) $FA_1 FA_2$   (c) $FA_2^*$
3. For each of the following NFAs below, convert them to Finite Automaton

(a)

(b)

4. For the language accepted by the following machine, find a different FA with four states. Find an NFA that accepts the same language and has only seven edges (where edges with two labels are counted twice).