Automata Theory: Assignment 4

Due date: September 20 (Thursday)

Problem 1 (6 points)
For each of the following three languages on $\Sigma = \{a, b\}$, draw a *deterministic* finite automaton that accepts it:

(a) All strings that have no b's (note that it includes λ).
(b) All strings with at least two a's and any number of b's.
(c) All strings with at most two a's and any number of b's.

Problem 2 (4 points)
For the alphabet $\Sigma = \{a, b\}$, draw a deterministic finite accepter that is equivalent to the following nondeterministic accepter: