Automata Theory: Assignment 4

Due date: January 31 (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 a's (note that it includes λ).
(b) All strings with three a's and any number of b's.
(c) All strings of lengths two, three, and four.

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