

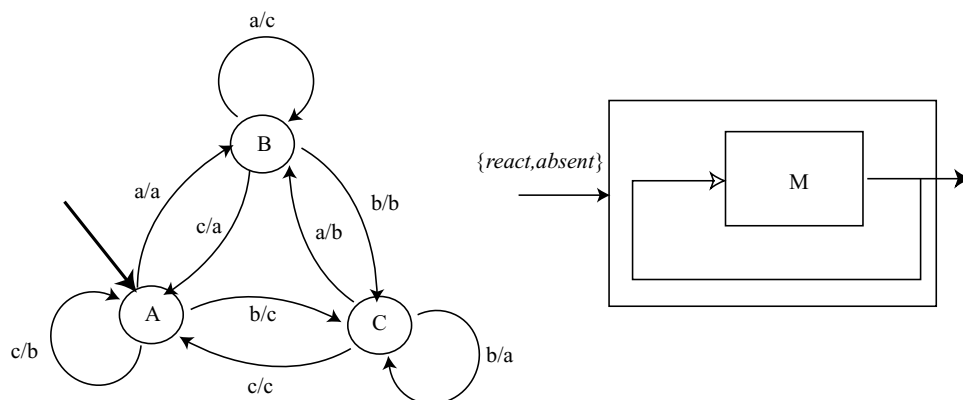
EECS20n, Quiz 2, 9/29/00

The quiz will take 15 minutes.

Please print your name, your lab section, and your TA's name here:

Last Name _____ First _____ Lab _____ TA's name _____

The figure on the left gives a state transition diagram for a machine M with 3 states and $Inputs = Outputs = \{a, b, c\}$. A is the initial state.



1. What is the state trajectory and the output sequence when the input sequence is $a, a, b, b, c, c, a, a, b, b, c, c, \dots$ where ellipsis means repeated forever?
2. Suppose M is placed in feedback form as shown on the right. Is the resulting machine well-formed? What is its output sequence corresponding to the input sequence $react, react, \dots$?