The purpose of this quiz is to help you determine whether or not you are well prepared for this course. Please hold to the requirements above, or this will not give you a valid reading of your preparation. Do NOT view "Grading your Background Quiz" below before taking this quiz. After you have taken the quiz, go to "Grading your Background Quiz" to assess your success on the quiz.

Success in this quiz should mean that you can do well in this course without a lot of extra review. Failure in this quiz doesn't necessarily mean you should drop the course, but it would mean that you should expect to work very, very hard if you want a good grade, and still might not succeed.

For now, just do the best you can and get as far as you can in the time available.

**Fifteen minutes** Figure 1 is a state diagram for a two-state machine. In Figure 2 show the state table for this machine and also your state assignment. In Figure 3, using at most one gate of each kind shown there, draw a logic circuit that implements that machine. (You don't have to use all the gates, and you are not allowed to add new gates or gate inputs: just interconnect the ones you need.)