

CSE 260M - Quiz 7

October 25, 2006

Name: _____

Student ID Number: _____

1. A combinational circuit (function) is defined by the following equation:

$$F(A,B,C,D) = AB'C + C'D' + ABCD + AB'CD$$

Design a circuit to implement the function using only an 8-to-1 mux.

You can assume the complemented and un-complemented inputs are both available.

To receive credit for this problem, you must properly label on inputs and outputs on the mux and follow the "cookbook" design procedure, i.e., simply guessing answers or playing with circuits until you come up with an answer that works is not acceptable.

Show all of your work, write neatly, and please don't write nasty comments that will serve only to infuriate your instructor.