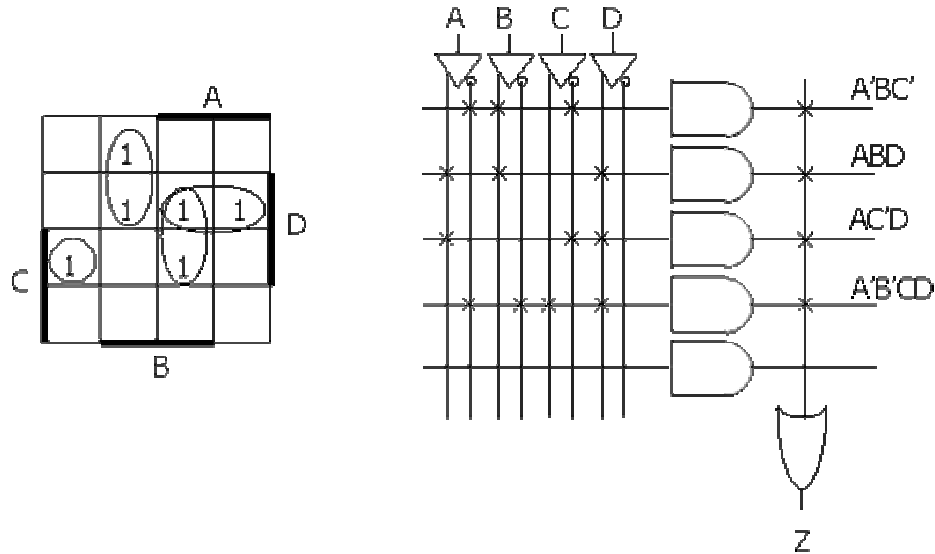


CSE370 Quiz 2 (4 February)

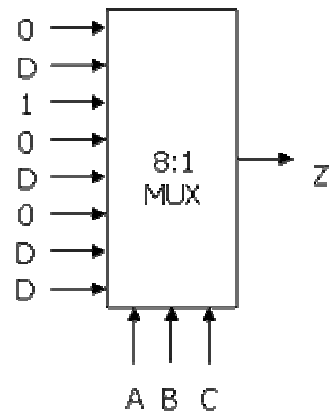
Name _____ Solution _____

Implement the function $Z(A, B, C, D) = \sum m(3, 4, 5, 9, 13, 15)$ using the PLA provided below.



Implement the function again using the 8:1 multiplexer provided below.

A	B	C	D	Z
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	1
0	1	0	0	1
0	1	0	1	1
0	1	1	0	0
0	1	1	1	0
1	0	0	0	0
1	0	0	1	1
1	0	1	0	0
1	0	1	1	0
1	1	0	0	0
1	1	0	1	1
1	1	1	0	0
1	1	1	1	1



$$Z = A'B'C'(0) + A'B'C(D) + A'BC'(1) + A'BC(0) + ABC'(D) + AB'C(0) + ABC(D) + ABC(D)$$