

# COEN 21 - PRE LAB

a) and b)

## Truth table

S	M	L	A
1	1	1	1
1	0	1	0
0	0	0	0
0	1	1	0

input = {S, M}

output = {L, A}

Light = 1, Alarm = 1

Light = 1, Alarm = 0

BOTH OFF

Light = 1, Alarm = 0

c) Logic Circuit

Alarm only triggered when  
 $S \cdot M = 1$

