Prelab 2
1.
Inputs: manual switch, S
      Motion detector, M1
      Disable switch, D
Outputs: light, L
      Alarm, A

2.

S	M1	D	L	A
0	0	0	0	0
0	0	1	0	0
0	1	0	1	0
0	1	1	0	0
1	0	0	1	0
1	0	1	1	0
1	1	0	1	1
1	1	1	1	0

3.
$S \cdot M1 \cdot D' = A$
$S + M1 \cdot D' = L$