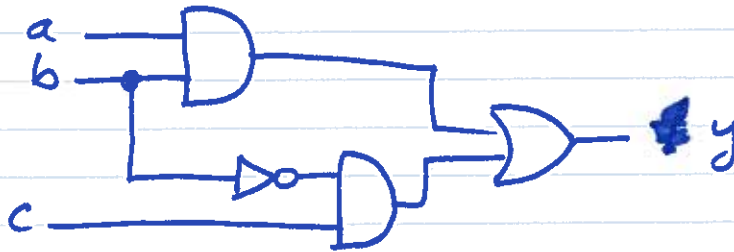


CSC 103
 HOMEWORK 2 SOLUTIONS
 2012
 D.T.

P1
 (2 points)



a	b	c	y
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	1

$$y = (a \text{ and } b) \text{ or } ((\text{not } b) \text{ and } c)$$

P2
 (2 points)

w1	w2	r	a
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	1

← rain but windows closed

← rain and 1 window open

← rain and other window open

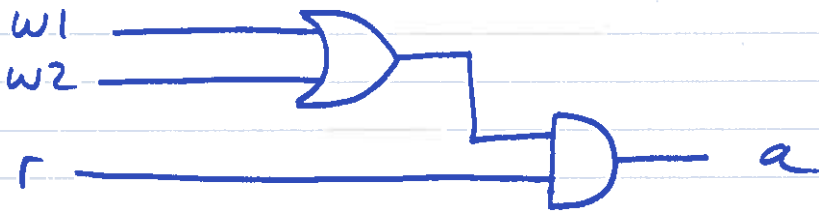
← rain and both windows open

$$a = (r \text{ and } w1 \text{ and } (\text{not } w2)) \\ \text{or } (r \text{ and } (\text{not } w1) \text{ and } (w2)) \\ \text{or } (r \text{ and } w1 \text{ and } w2)$$

those who have done logic before saw a simpler version of the equation:

$$a = r \text{ and } (w1 \text{ or } w2)$$

(but you didn't lose points if you didn't see that)



total 4 points

4/4 → A
3.7/4 → A-
3.3/4 → B+
3.0/4 → B
etc..