

Name: Oluwatobiloba Sokoya

Lab 1 solution

1)a

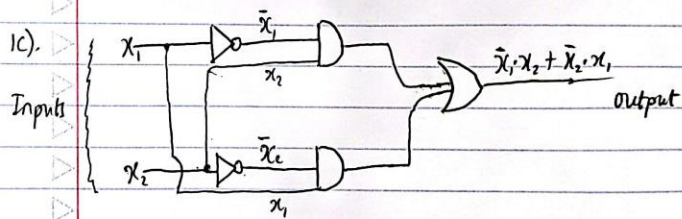
XOR Truth table.

Inputs		Expected output Y
X ₁	X ₂	
0	0	0
1	0	1
0	1	1
1	1	0

1b). XOR logical equation =

$$Y = (\bar{X}_1 \cdot X_2) + (X_1 \cdot \bar{X}_2)$$

1c).



2. XOR Logical Equation

$$Y = X_1' \cdot X_2 + X_1 \cdot X_2'$$

3. XOR Truth Table

X1 (Input)	X2 (Input)	Y (Output)
0	0	0

0	1	1
1	0	1
1	1	0

4.

