TEJ2O1   **Unit #4: Assignment #1**

Name: _Ashwin_   **Suggested Due Date: Wed 08 Apr 20**

Note: You will be advised as to how evaluation is to occur.

Using the Summary of Basic Logic Gates.pdf
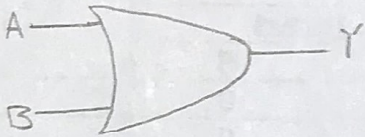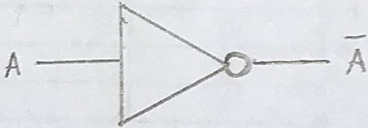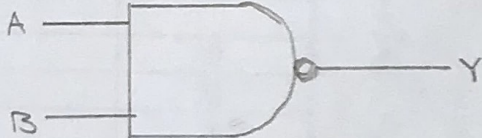→ Course Website → Unit 4 → April_2020→Mon_06_Apr_2020, fill in the charts on Page 1 and Page 2
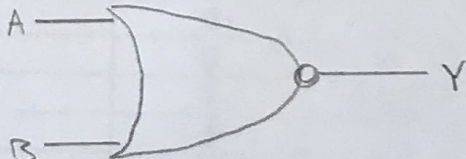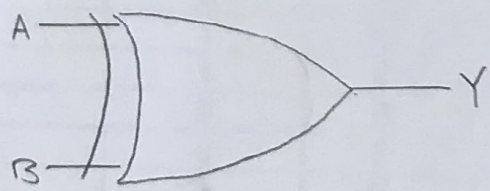
<u>Table 1.1:</u>   Truth Tables for Logic Gates

Logic Function	Truth Table		
	Inputs		Output
	B	A	Y
AND	0	0	0
	0	1	0
	1	0	0
	1	1	1
OR	0	0	0
	0	1	1
	1	0	1
	1	1	1
Inverter or NOT		0	1
		1	0
NAND	0	0	1
	0	1	1
	1	0	1
	1	1	0
NOR	0	0	1
	0	1	0
	1	0	0
	1	1	0
XOR	0	0	0
	0	1	1
	1	0	1
	1	1	0
XNOR	0	0	1
	0	1	0
	1	0	0
	1	1	1

Table 1.2:   **Summary of Logic Gates**

Note: Use a straight edge to draw the circuit diagrams. Straight lines, or right angles only, please.

Logic Function	Boolean Expression	Circuit Diagram
AND	$A \cdot B = Y$	
OR	$A + B = Y$	
Inverter or NOT	$A = \bar{A}$	
NAND	$\overline{A \cdot B} = Y$	
NOR	$\overline{A + B} = Y$	
XOR	$A \oplus B = Y$	
XNOR	$\overline{A \oplus B} = Y$	