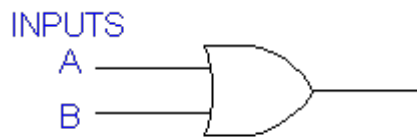


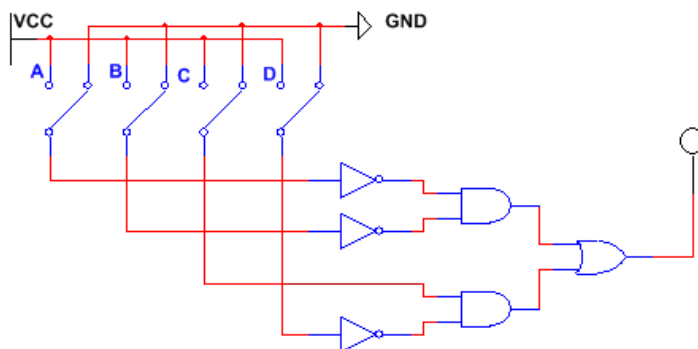
1. For the truth table below, what type of logic gate is it? _____

A	B	C	X
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0

2. What is the output X if A=1 and B=0? _____



3. Write the equation for this logic circuit: _____



4. What is the period and duty cycle of this waveform if each vertical line is 10ms apart? _____



5. How many lines in the truth table for this expression using 3 inputs will have a result that is true (1)? $\overline{!AB} + \overline{!BC}$ _____

GND



A



B



VCC



6. Draw the wires to create this circuit.



Include wires for power and ground. (one chip will not be used.)

7. What expression is equivalent to $XY + YZ + X$?

8. Simplify this expression

$$\overline{(\overline{AB})C}$$

9. What is the total resistance in the circuit? What is the current and voltage at R2?

