Boolean Logic Test

1. Complete the following truth table.

A	B	AND	OR	XOR	NOT A	NAND	NOR
0	0	0	0	0	1	1	1
0	1	0	1	1	1	1	0
1	0	0	1	1	0	1	0
1	1	1	1	0	0	0	0

2. Complete the following truth table for the Boolean expression

A XOR (**B** OR **A**)

A	B	(B OR A)	A XOR (B OR A)
0	0	0	0
0	1	1	1
1	0	1	0
1	1	1	0

3. Create a truth table for the Boolean expression

A AND (NOT **B** OR **A**)

A	B	NOT B	(NOT B OR A)	A AND
0	0	1	1	0
0	1	0	0	0
1	0	1	1	1
1	1	0	1	1

4. Create a logic diagram for the following Boolean expression.

   (**A** AND **B**) OR NOT **A**
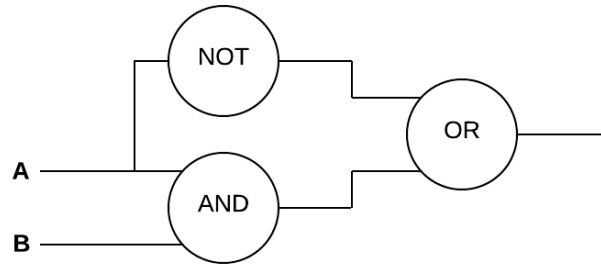
5. Create a logic diagram for the following Boolean expression.

   (**A** AND **B**) OR (**A** XOR **B**)