Operator	Logic Gate		Example			Rule
NOT		$\overline{A}$	**INPUT**		**OUTPUT**	**Invert**
			A		NOT A	
			0		1	
			1		0	
AND		**A.B**	**INPUT**		**OUTPUT**	**Both** A and B = **1** → **1**
			A	B	A AND B	
			0	0	0	Anything ELSE → 0
			0	1	0	
			1	0	0	
			1	1	1	
NAND		$\overline{A.B}$	**INPUT**		**OUTPUT**	**Both** A and B = **1** → **0**
			A	B	A AND B	Anything ELSE → **1**
			0	0	1	
			0	1	1	
			1	0	1	
			1	1	0	
OR		**A+B**	**INPUT**		**OUTPUT**	**Either** A or B = **1** → **1**
			A	B	A AND B	
			0	0	0	Anything ELSE → 0
			0	1	1	
			1	0	1	
			1	1	1	
NOR		$\overline{A+B}$	**INPUT**		**OUTPUT**	**Both** A and B = **0** → **1**
			A	B	A AND B	
			0	0	1	Anything ELSE → **0**
			0	1	0	
			1	0	0	
			1	1	0	
XOR		$A \oplus B$	**INPUT**		**OUTPUT**	**Either** A or B = **1** → **1**
			A	B	A AND B	
			0	0	0	**Excludes BOTH being 1**
			0	1	1	
			1	0	1	
			1	1	0	

Logic Gate Table