

AND



$$Q = A \cdot B$$

A	B	Q
0	0	0
0	1	0
1	0	0
1	1	1

OR



$$Q = A + B$$

A	B	Q
0	0	0
0	1	1
1	0	1
1	1	1

NOT



$$Q = \bar{A}$$

A	Q
0	1
1	0

XOR



$$Q = A \oplus B$$

A	B	Q
0	0	0
0	1	1
1	0	1
1	1	0

NAND



$$Q = \overline{A \cdot B}$$

A	B	Q
0	0	1
0	1	1
1	0	1
1	1	0

NOR



$$Q = \overline{A + B}$$

A	B	Q
0	0	1
0	1	0
1	0	0
1	1	0