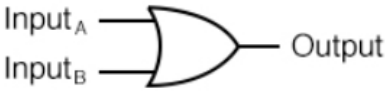
Logické výrazy

OR

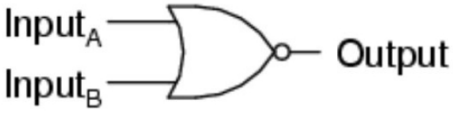
- $Y = A + B$



A	B	Output
0	0	0
0	1	1
1	0	1
1	1	1

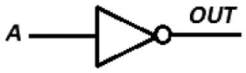
NOR ↓

$Y = \overline{A + B}$



A	B	Output
0	0	1
0	1	0
1	0	0
1	1	0

NOT



AND

- $Y = A \cdot B$

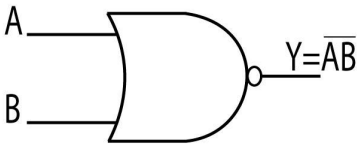
A	B	Output
0	0	0
0	1	0
1	0	0
1	1	1

XOR

$$Y = A \oplus B$$
$$= A \cdot \overline{B} + \overline{A} \cdot B$$
$$= (A + B) \cdot (\overline{A} + \overline{B})$$

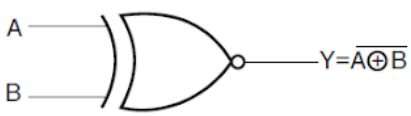
A	B	Out
0	0	0
0	1	1
1	0	1
1	1	0

NAND



A	B	Output
0	0	1
0	1	1
1	0	1
1	1	0

XNOR



$$Y = (\overline{A \oplus B}) = (A.B + \overline{A}.\overline{B})$$
$$(A + \overline{B}) \cdot (\overline{A} + B)$$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	1