

**Exclusive-OR (XOR)**

- Two inputs only

Symbol



Truth Table

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

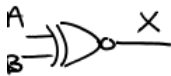
Logic Expression

$$X = A \oplus B$$

**Exclusive-NOR (XNOR)**

- Invert the output of the XOR Gate  
- Two inputs only

Symbol



Truth Table

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

Logic Expression

$$X = \overline{A \oplus B}$$