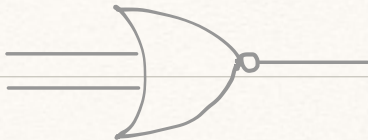


4) NOR

(OR)(Not)

Addition +
Inverse



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

$$\overline{A+B}$$

5) NAND

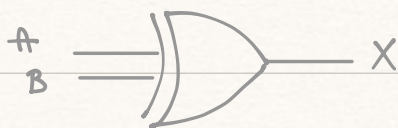


Multiply +
Inverse
(Not)(And)

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

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

6) XOR



-) Different $\rightarrow 1$
-) Same $\rightarrow 0$

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

$$X = (A \cdot \bar{B}) + (\bar{A} \cdot B)$$

Remember

$$X = A \oplus B$$