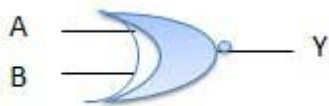


## XNOR Gate

XNOR gate is a special type of gate. It can be used in the half adder, full adder and subtractor. The exclusive-NOR gate is abbreviated as EX-NOR gate or sometime as X-NOR gate. It has n input ( $n \geq 2$ ) and one output.

$$\begin{aligned} Y &= A \text{ XOR } B \text{ XOR } C \dots\dots N \\ Y &= A \oplus B \oplus C \dots\dots N \\ Y &= \overline{A B} + A B \end{aligned}$$

### Logic diagram



### Truth Table

Inputs		Output
A	B	$A \oplus B$
0	0	1
0	1	0
1	0	0
1	1	1