

T = True
F = False

Logical identity

p	p
T	T
F	F

NOT, $\neg p$, \bar{p} , $\sim p$

Logical negation

p	NOT p
T	F
F	T

AND, $p \wedge q$, $p \cdot q$

Logical conjunction

p	q	p AND q
T	T	T
T	F	F
F	T	F
F	F	F

OR, $p \vee q$, $p + q$

Logical disjunction

p	q	p OR q
T	T	T
T	F	T
F	T	T
F	F	F

XOR, $p \neq q$, $p \ltimes q$

Exclusive disjunction

p	q	p XOR q
T	T	F
T	F	T
F	T	T
F	F	F

NAND, $\overline{p \wedge q}$

Logical NOT AND

p	q	p NAND q
T	T	F
T	F	T
F	T	T
F	F	T

NOR, $\overline{p \vee q}$

Logical NOT OR

p	q	p NOR q
T	T	F
T	F	F
F	T	F
F	F	T

XNOR, $p = q$, $p \leftrightarrow q$

Logical equality

p	q	$p = q$
T	T	T
T	F	F
F	T	F
F	F	T

IF p THEN q , $p \rightarrow q$, p IMP q

Logical implication

p	q	$p \rightarrow q$
T	T	T
T	F	F
F	T	T
F	F	T