

Algebraic forms of the 16 functions of 2 variables

Function	Operator Symbol	Name
F0 = 0		Null (0)
F1 = xy	$x \cdot y$	AND
F2 = xy'	x/y	Inhibition
F3 = x		Transfer
F4 = $x'y$	y/x	Inhibition
F5 = y		Transfer
F6 = $xy' + x'y$	$x \oplus y$	Exclusive-OR (XOR)
F7 = $x+y$	$x+y$	OR
F8 = $(x+y)'$	$x \downarrow y$	Not-OR (NOR)
F9 = $xy + x'y'$	$x \leftrightarrow y$	Equivalence
F10 = y'	y'	Complement
F11 = $x+y'$	$x \subset y$	Implication
F12 = x'	x'	Complement
F13 = $x'+y$	$x \supset y$	Implication
F14 = $(xy)'$	$x \supset y$	Not-AND (NAND)
F15 = 1	$x \uparrow y$	Identity (1)