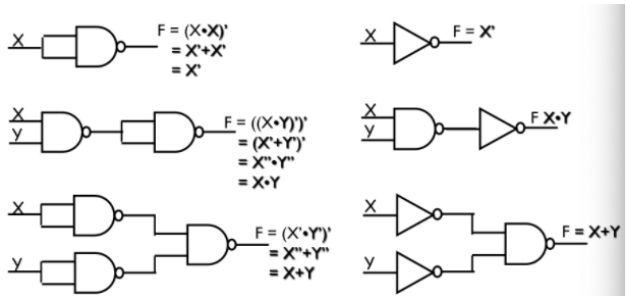
Digital Logic Cheat Sheet

- Similar materials to that below would be on the cheat sheet with more comprehensive formatting and titles



XOR:"not-equal" gate

X	y	F = X⊕y
0	0	0
0	1	1
1	0	1
1	1	0

XNOR:"equal" gate

X	y	F = $\overline{X \oplus y}$
0	0	1
0	1	0
1	0	0
1	1	1

Identity:	X + 0 = X	Dual: X • 1 = X
Null:	X + 1 = 1	Dual: X • 0 = 0
Idempotent:	X + X = X	Dual: X • X = X
Involution:	(X')' = X	
Complementarity:	X + X' = 1	Dual: X • X' = 0
Commutative:	X + Y = Y + X	Dual: X • Y = Y • X
Associative:	(X+Y)+Z=X+(Y+Z)	Dual: (X•Y)•Z=X•(Y•Z)
Distributive:	X•(Y+Z)=(X•Y)+(X•Z)	Dual: X+(Y•Z)=(X+Y)•(X+Z)
Uniting:	X•Y+X•Y'=X	Dual: (X+Y)•(X+Y')=X