

**Table 1: Postulates and Theorems of Boolean Algebra**

Postulate 2	(a) $x + 0 = x$	(b) $x * 1 = x$
Postulate 5	(a) $x + x' = 1$	(b) $x * x' = 0$
Theorem 1	(a) $x + x = x$	(b) $x * x = x$
Theorem 2	(a) $x + 1 = 1$	(b) $x * 0 = 0$
Theorem 3 (involution)	$(x')' = x$	
Postulate 3, (commutation)	(a) $x + y = y + x$	(b) $xy = yx$
Theorem 4, (association)	(a) $x + (y + z) = (x + y) + z$	(b) $x(yz) = (xy)z$
Postulate 4, (distribution)	(a) $x(y + z) = xy + xz$	(b) $x + yz = (x + y)(x + z)$
Theorem 5, (Demorgan's Law)	(a) $(x + y)' = x'y'$	(b) $(xy)' = x' + y'$
Theorem 6, (absorption )	(a) $x + xy = x$	(b) $x(x + y) = x$

(Derived from "Digital Design", by M. Morris Mano)