Some Important Boolean Identities

Identity	Name
$ \overline{\overline{x}} = x $	Law of the double complement
x + x = x	Idempotent Laws
$x \cdot x = x$	
x + 0 = x	Identity Laws
$x \cdot 1 = x$	
x + 1 = 1	Domination Laws
$x \cdot 0 = 0$	
x + y = y + x	Commutative Laws
xy = yx	
x + (y+z) = (x+y) + z	Associative Laws
x(yz) = (xy)z	
x + yz = (x+y)(x+z)	Distributive Laws
x(y+z) = xy + xz	
$\overline{(xy)} = \overline{x} + \overline{y}$	De Morgan's Laws
$\overline{(x+y)} = \overline{x}\overline{y}$	
x + xy = x	Absorption Laws
x(x+y) = x	
$x + \overline{x} = 1$	Unit Property
$x\overline{x} = 0$	Zero Property