

| Laws of Logic | |
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| Law of Identity | $A=A$ $\bar{A} + \bar{A}$ |
| Commutative Law | $A \cdot B = B \cdot A$ $A + B = B + A$ |
| Associative Law | $A \cdot (B \cdot C) = A \cdot B \cdot C$ $A + (B + C) = A + B + C$ |
| Idempotent Law | $A \cdot A = A$ $A + A = A$ |
| Double Negative Law | $\bar{\bar{A}} = A$ |
| Complementary Law | $A \cdot \bar{A} = 0$ $A + \bar{A} = 1$ |
| Law of Intersection | $A \cdot 1 = A$ $A \cdot 0 = 0$ |
| Law of Union | $A + 1 = 1$ $A + 0 = A$ |
| DeMorgan's Theorem | $\overline{AB} = \bar{A} + \bar{B}$ $\overline{A + B} = \bar{A} \cdot \bar{B}$ |
| Distributive Law | $A \cdot (B + C) = (A \cdot B) + (A \cdot C)$ $A + (B \cdot C) = (A + B) \cdot (A + C)$ |
| Law of Absorption | $A \cdot (A + B) = A$ $A + (A \cdot B) = A$ |
| Law of Common Identities | $A \cdot (\bar{A} + B) = A \cdot B$ $A + (\bar{A} \cdot B) = A + B$ |