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| **Law** | **Logical Equivalence** |
| Identity Law | p ∧ T ≡ p p ∨ F ≡ p |
| Domination Law | p ∧ F ≡ F p ∨ T ≡ T |
| Negation Law | p ∧ ¬p ≡ F p ∨ ¬p ≡ T |
| Double negation Law | ¬(¬p) ≡ p |
| Idempotent Law | p ∧ p ≡ p p ∨ p ≡ p |
| Commutative Law | p ∧ q ≡ q ∧ p p ∨ q ≡ q ∨ p |
| Associative Law | (p ∧ q) ∧ r ≡ p ∧ (q ∧ r) (p ∨ q) ∨ r ≡ p ∨ (q ∨ r) |
| Distributive Law | p ∨ (q ∧ r) ≡ (p ∨ q) ∧ (p ∨ r) p ∧ (q ∨ r) ≡ (p ∧ q) ∨ (p ∧ r) |
| De Morgan’s Law | ¬(p ∧ q) ≡ ¬p ∨ ¬q ¬(p ∨ q) ≡ ¬p ∧ ¬q |
| Absorption Law | p ∧ (p ∨ q) ≡ p p ∨ (p ∧ q) ≡ p |
| Implication Law | p → q ≡ ¬p ∨ q |