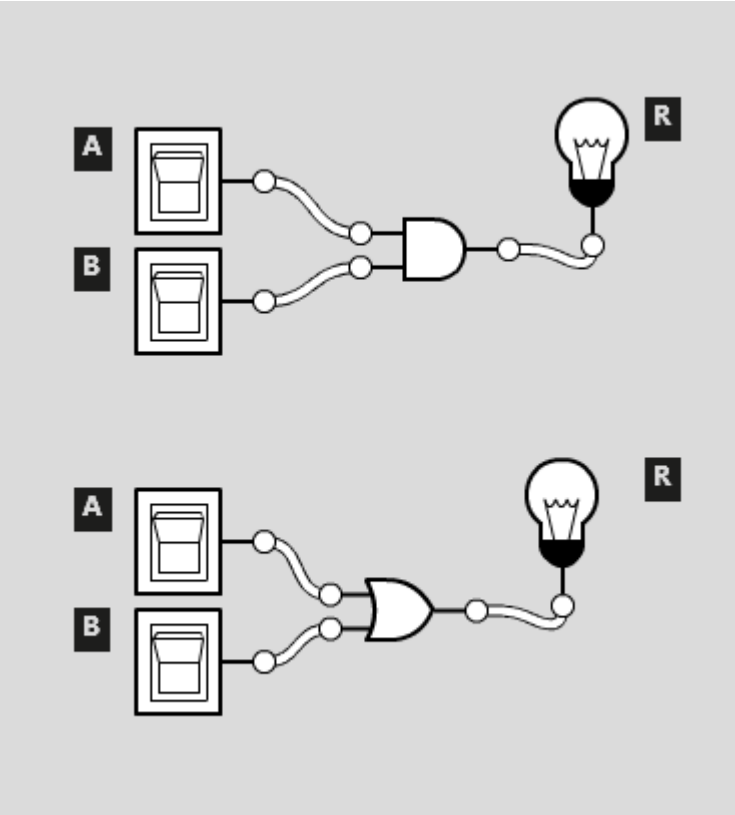
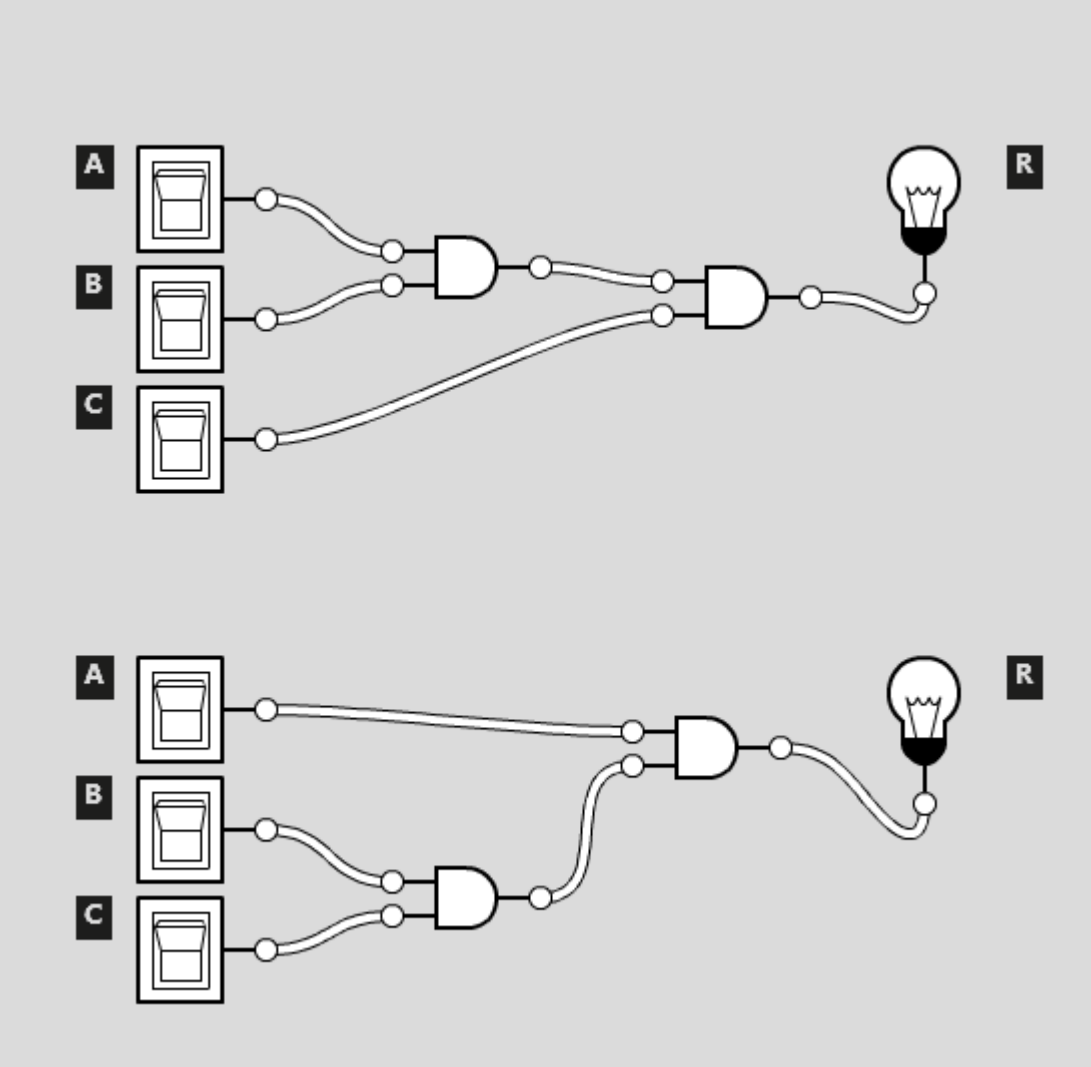


Commutative equivalence law

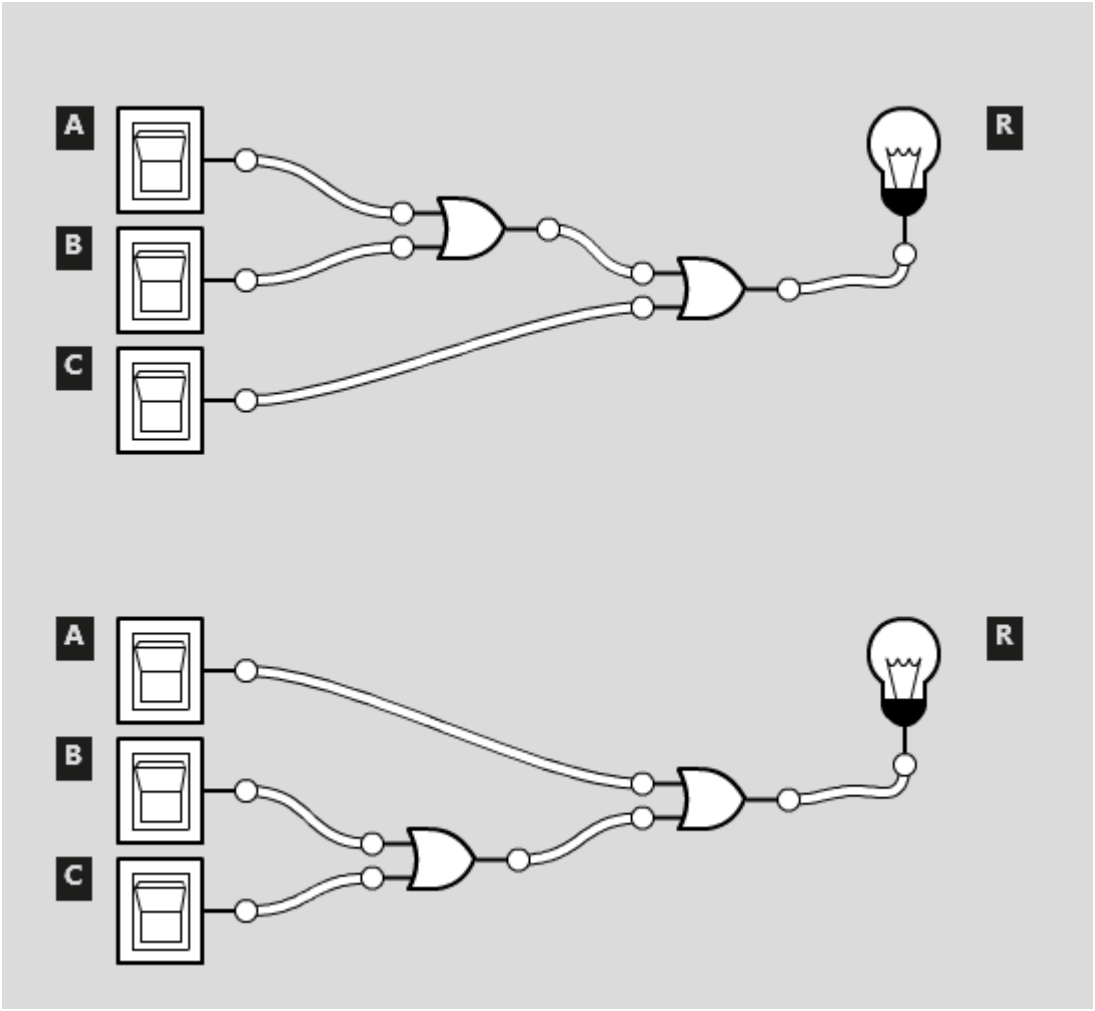
$a \wedge b \equiv b \wedge a$ (Fig 1)

$a \vee b \equiv b \vee a$ (Fig 2)



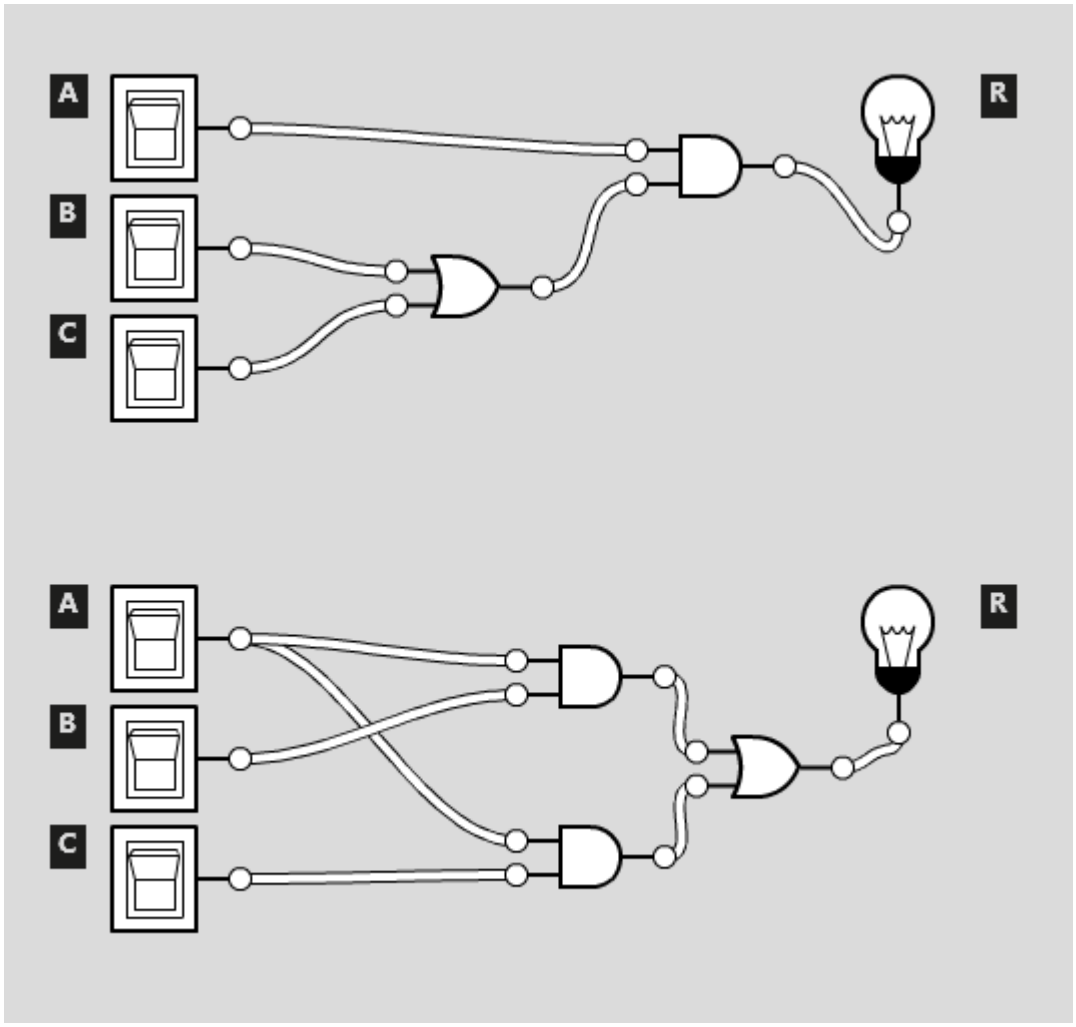
Associative equivalence law

$(a \wedge b) \wedge c \equiv a \wedge (b \wedge c)$



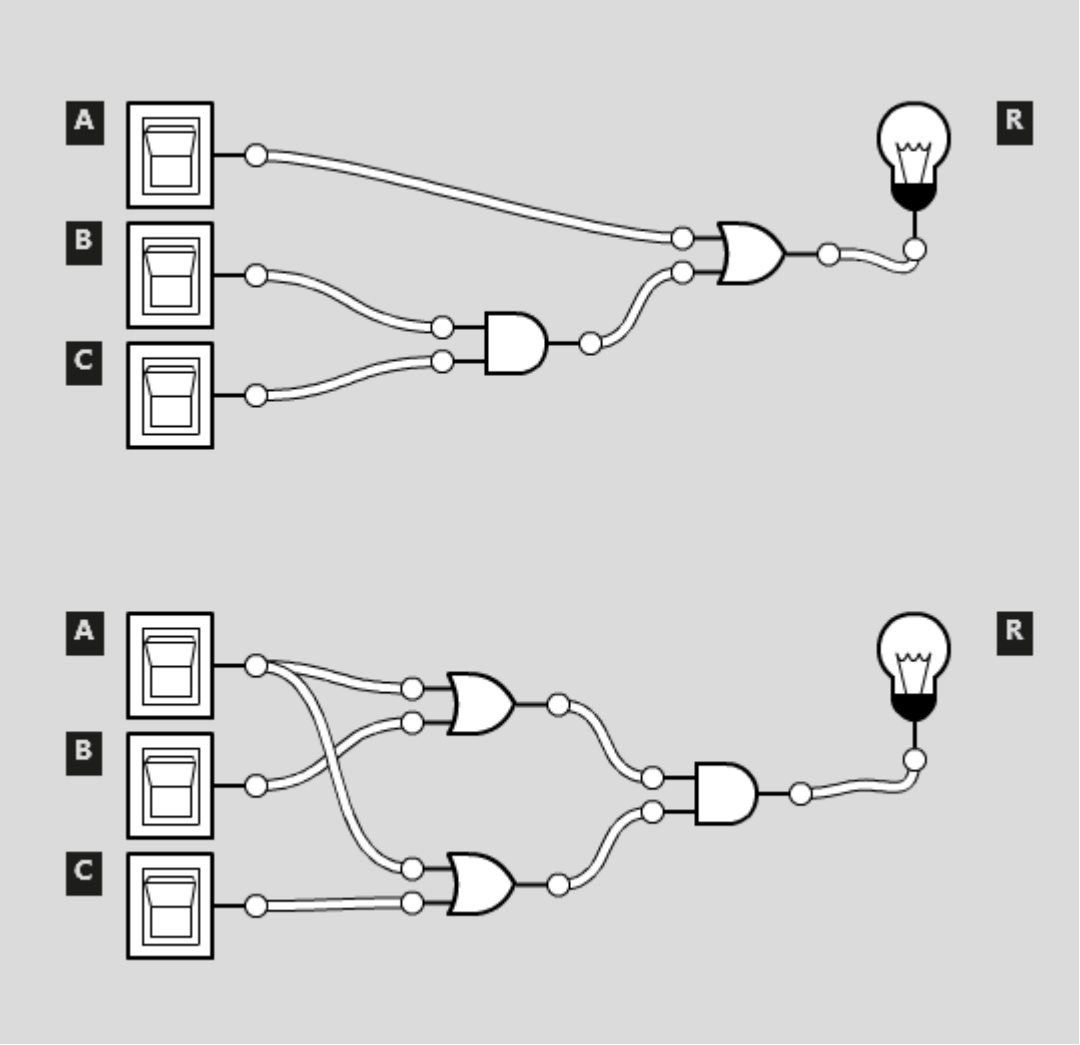
Associative equivalence law

(a ∨ b) ∨ c ≡ a ∨ (b ∨ c)



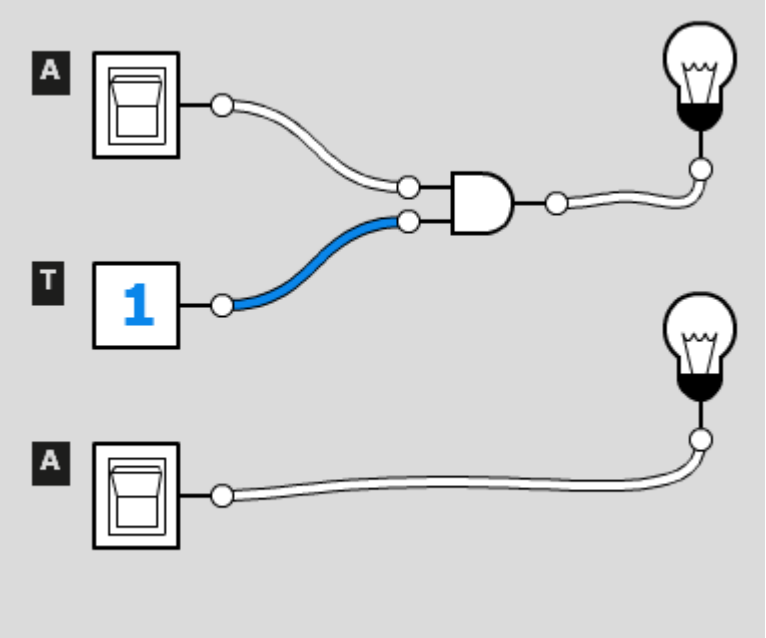
Distributive equivalence law

$a \wedge (b \vee c) \equiv (a \wedge b) \vee (a \wedge c)$



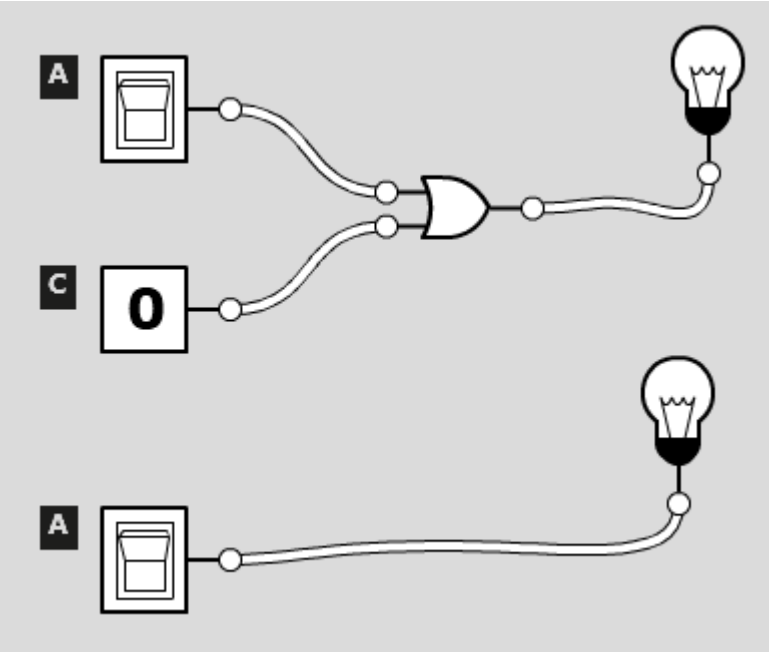
Distributive equivalence law

$a \vee (b \wedge c) \equiv (a \vee b) \wedge (a \vee c)$



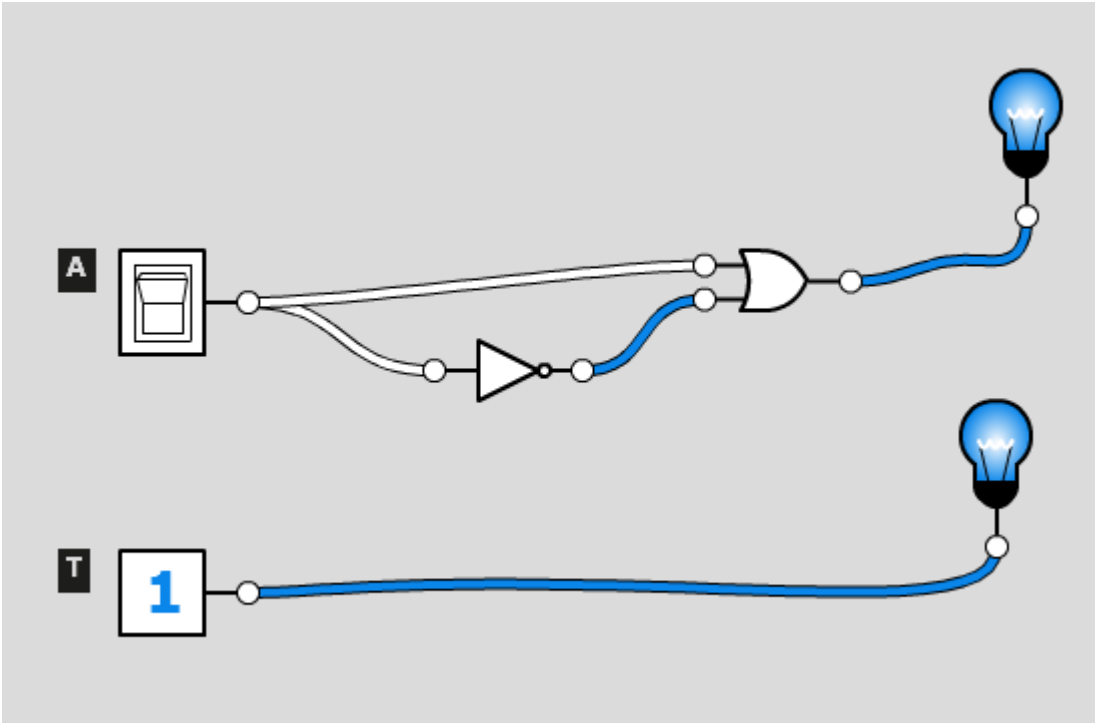
Identity equivalence law

a ∧ t ≡ a



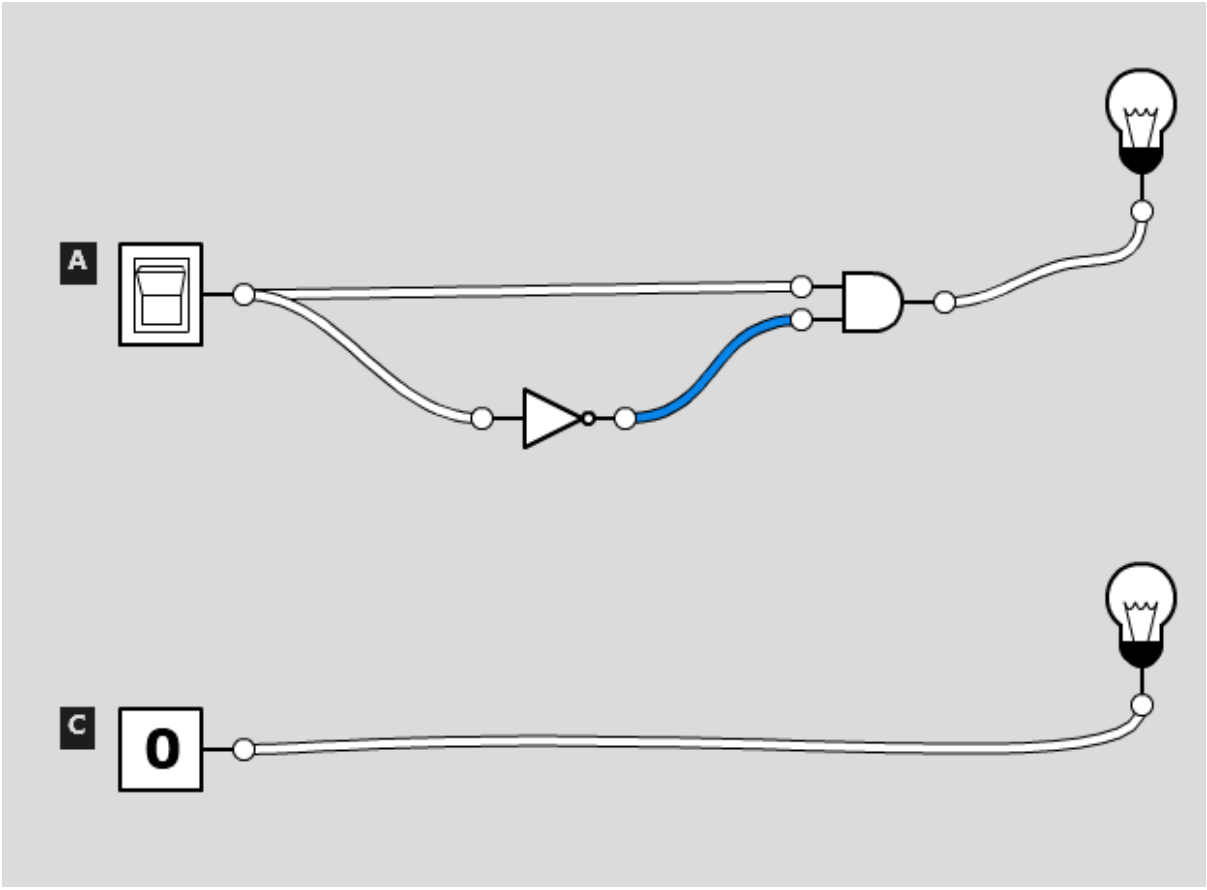
Identity equivalence law

a V c ≡ a



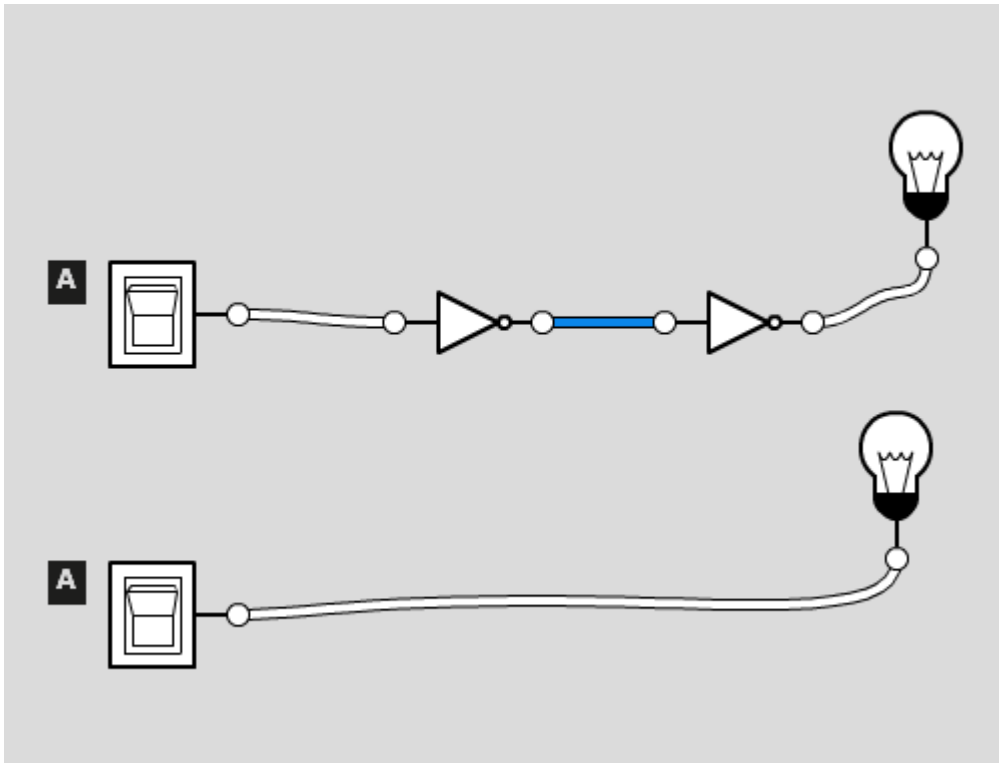
Negation equivalence law

a V ¬a ≡ t



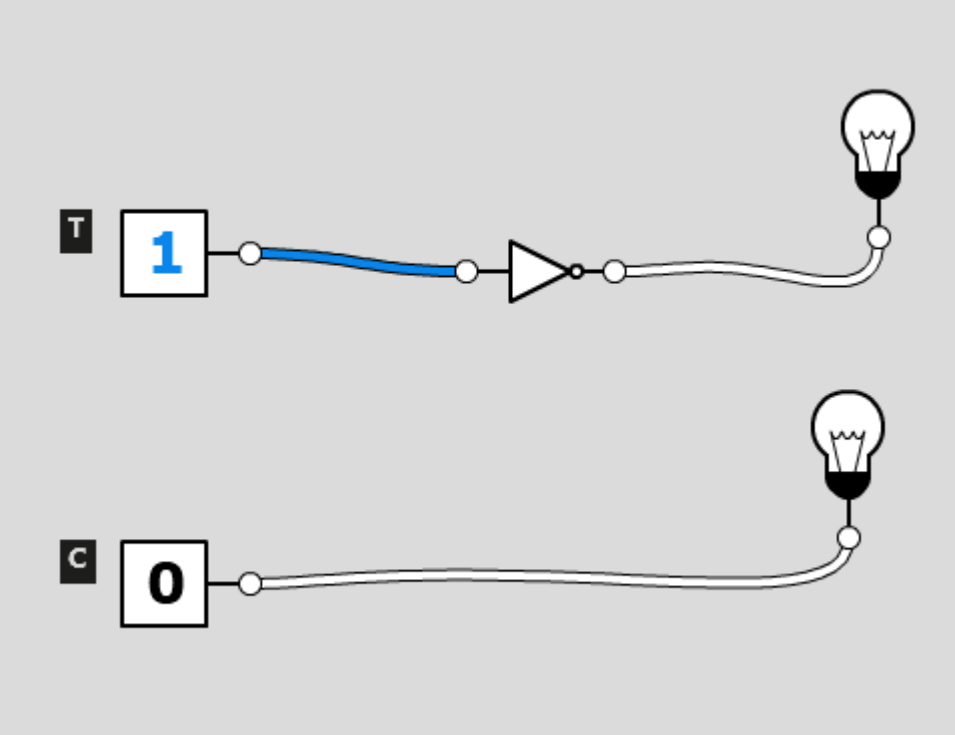
Negation equivalence law

$a \wedge \neg a \equiv c$



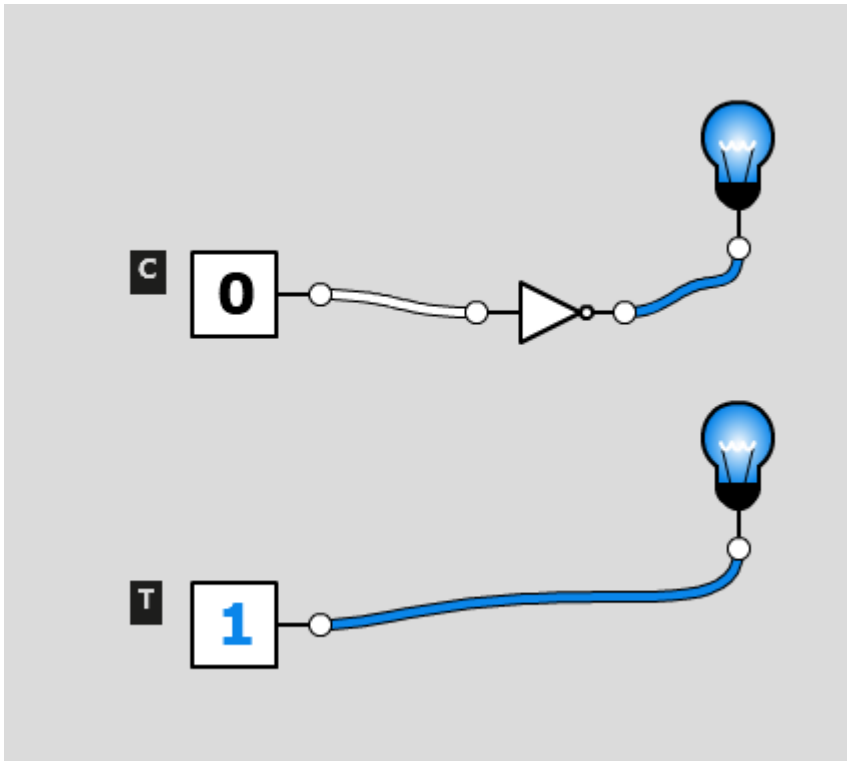
Negation equivalence law

¬(¬a) ≡ a



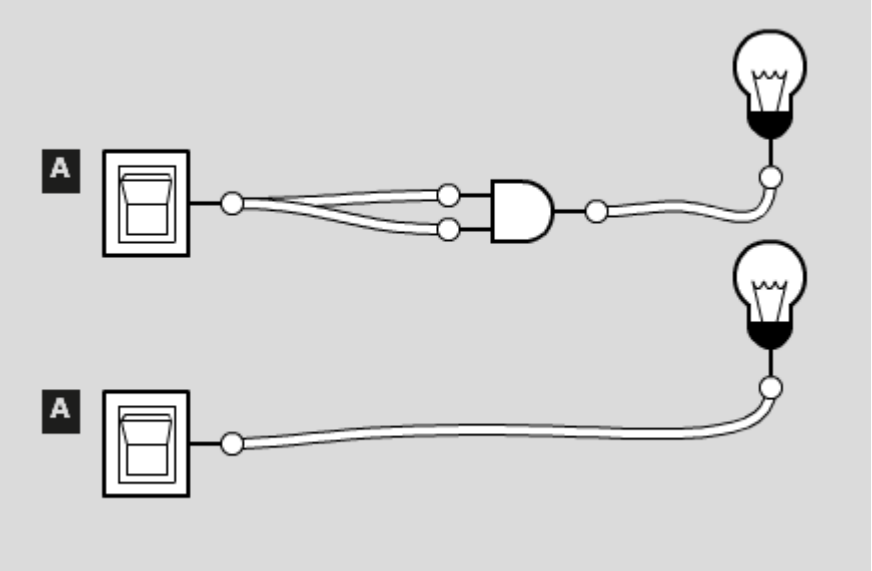
Negation equivalence law

¬ t ≡ c



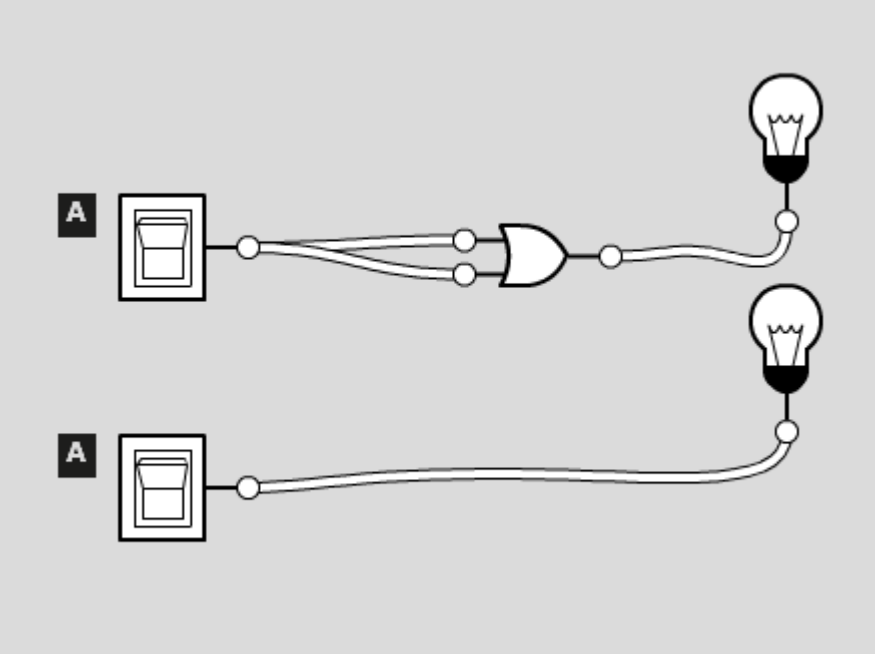
Negation equivalence law

¬ c ≡ t



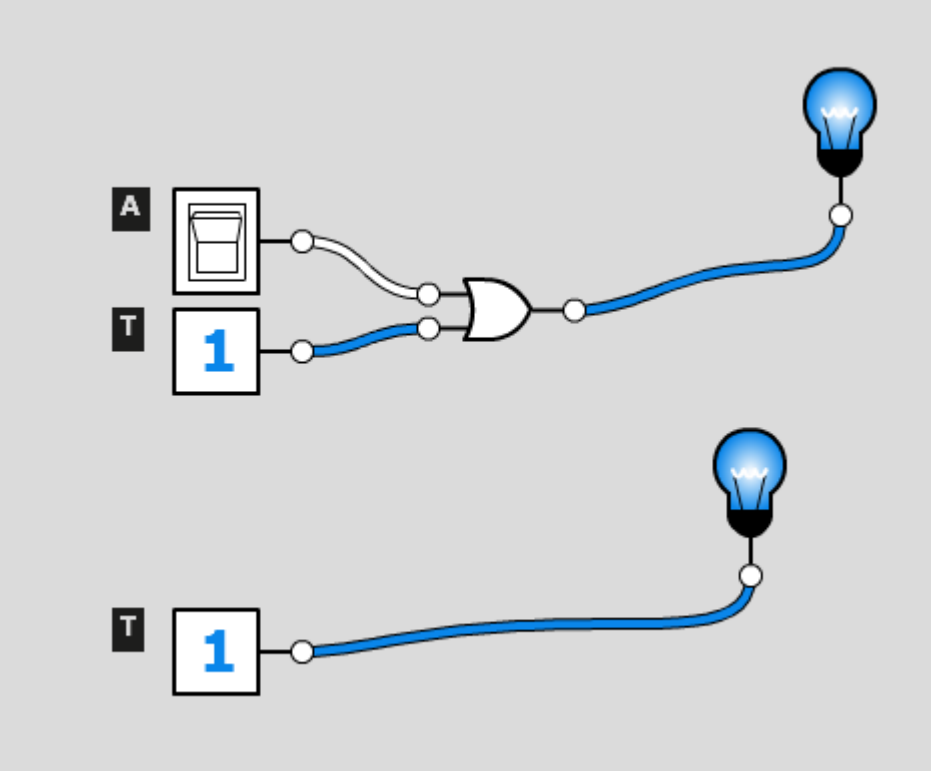
Idempotent equivalence law

$a \wedge a \equiv a$



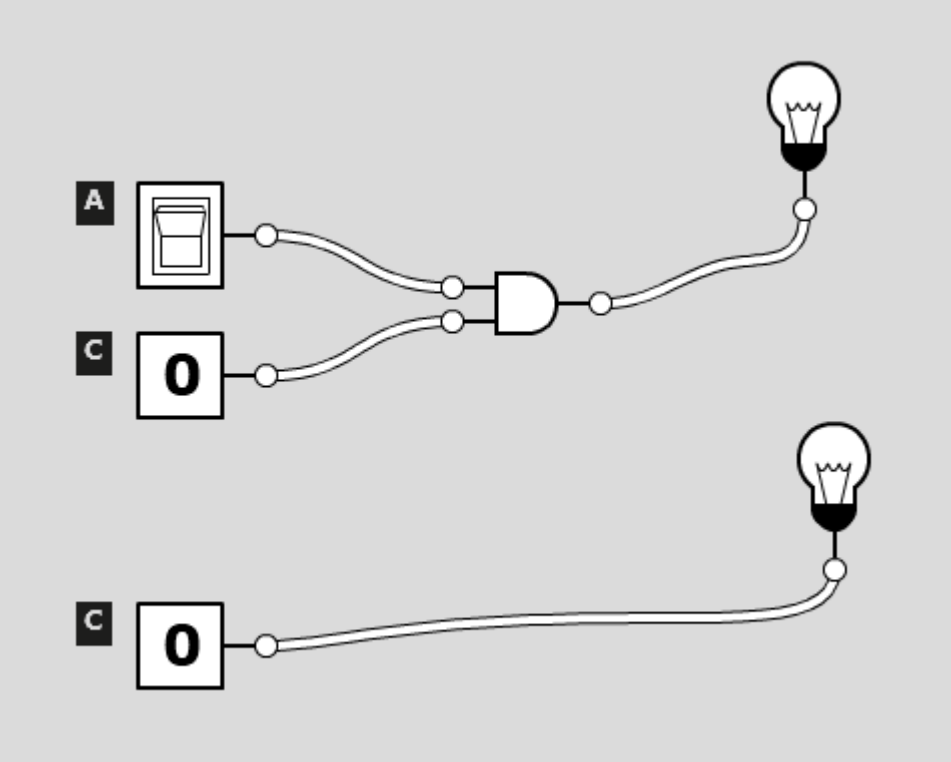
Idempotent equivalence law

a V a ≡ a



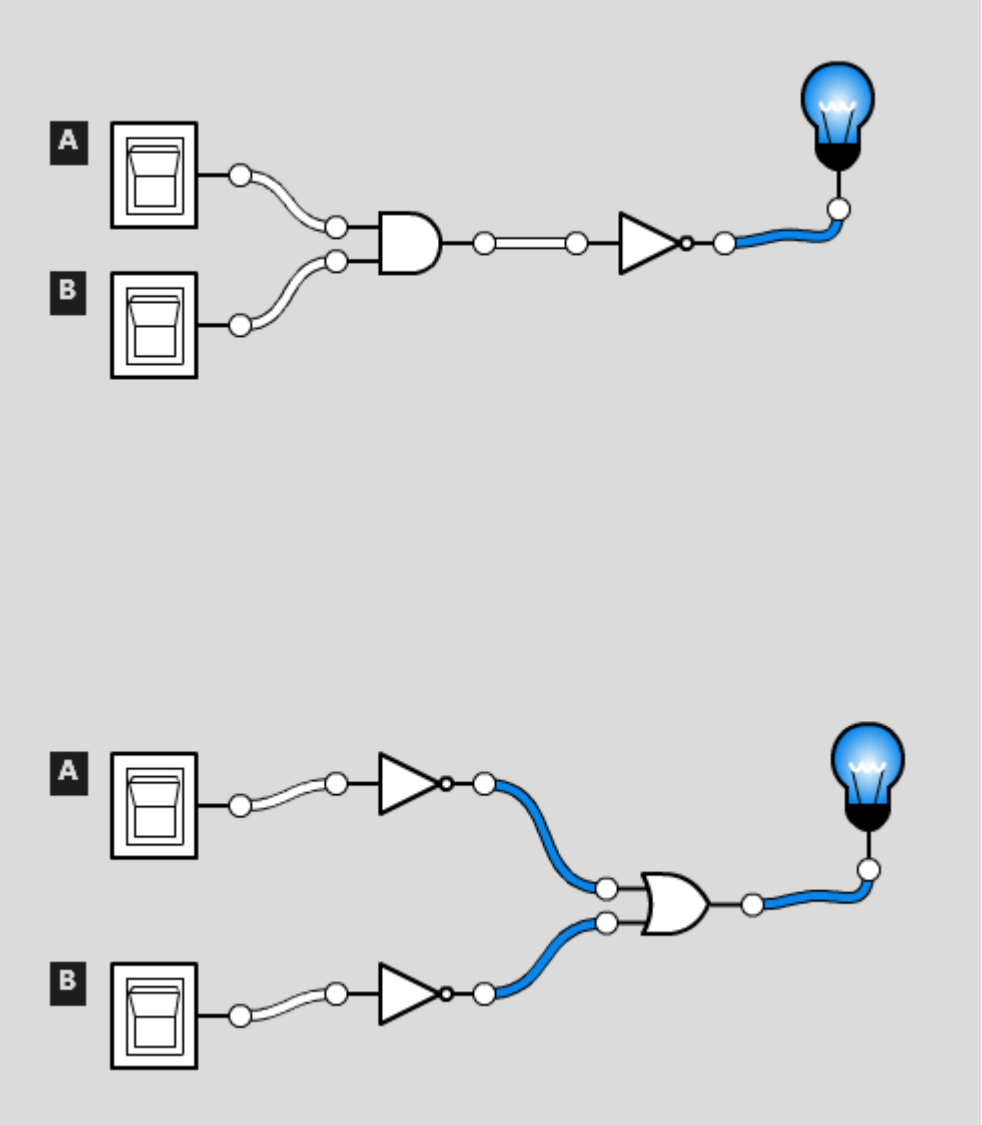
Universal bounds equivalence law

a V t ≡ t



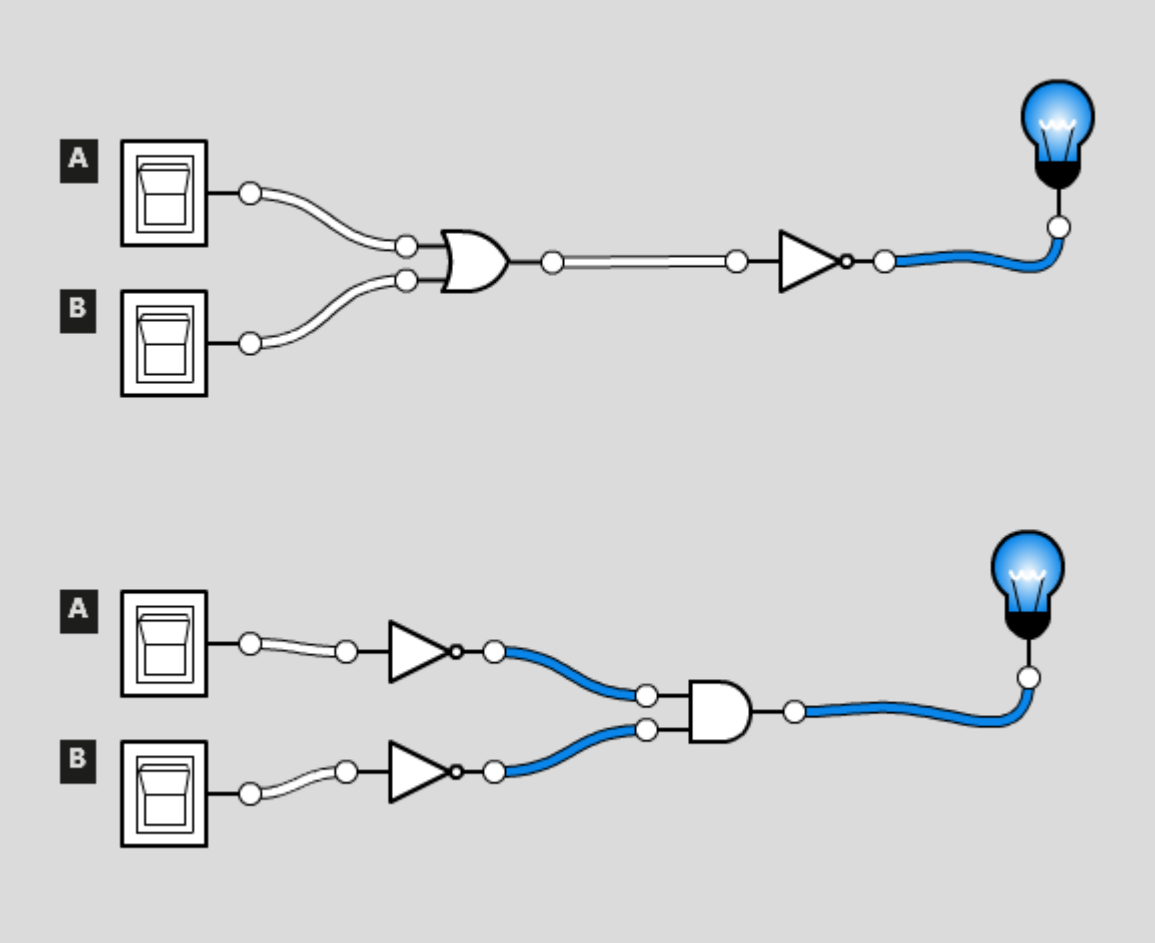
Universal bounds equivalence law

$a \wedge c \equiv c$



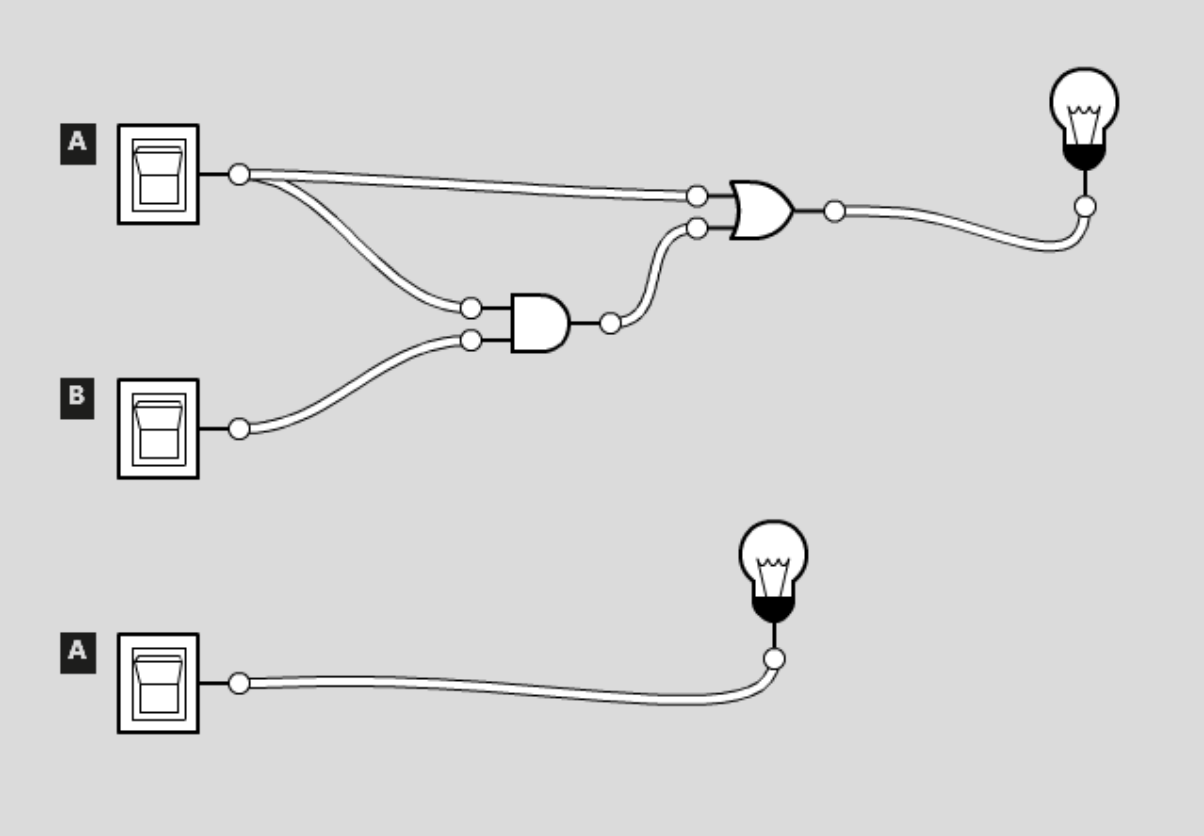
De Morgan’s equivalence law

¬(a ∧ b) ≡ ¬a ∨ ¬b



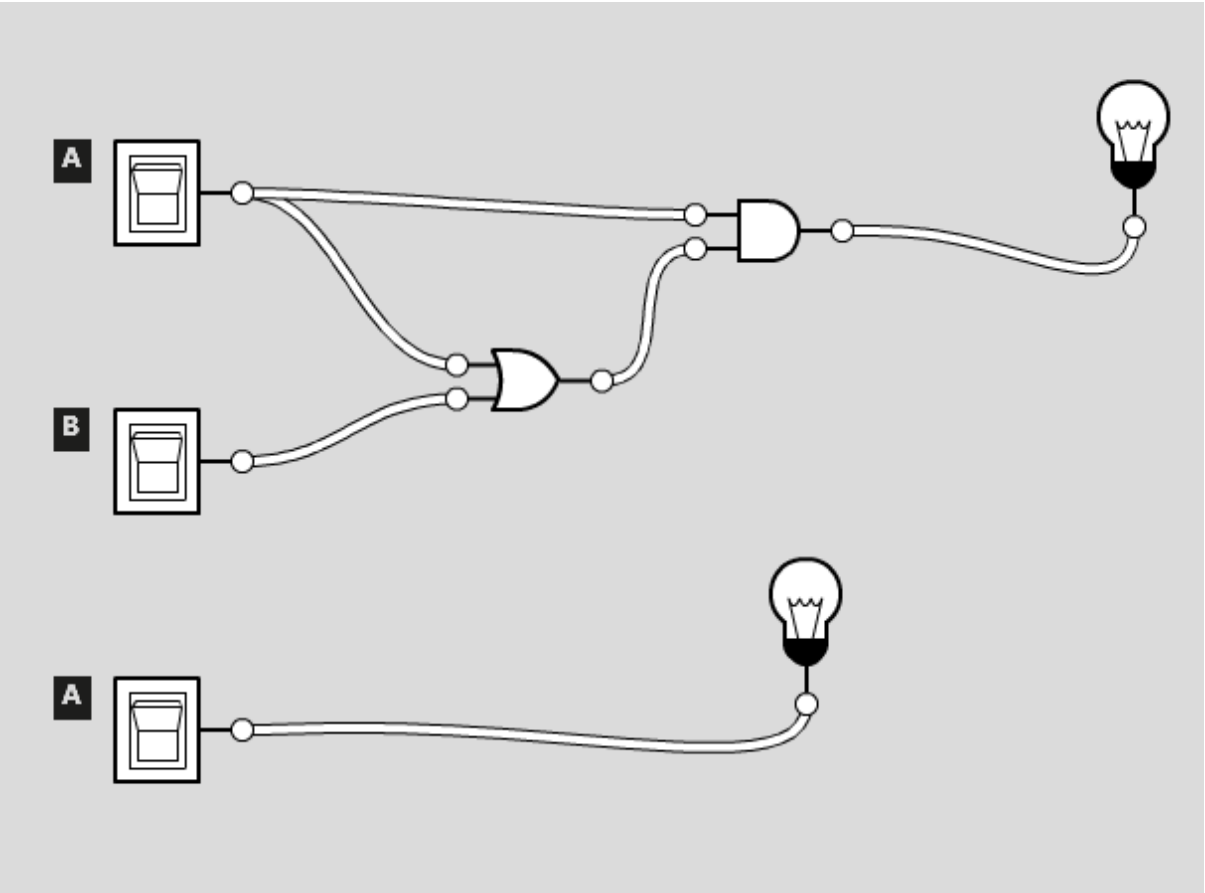
De Morgan’s equivalence law

¬(a ∨ b) ≡ ¬a ∧ ¬b



Absorption equivalence law

$a \vee (a \wedge b) \equiv a$



Absorption equivalence law

$a \wedge (a \vee b) \equiv a$