Theorem 2 in Section 1.2

Given any statement variables p, q, and r, a tautology $\mathbf{t}$ and a contradiction $\mathbf{c}$, the following logical equivalences hold.

a. *Commutative laws:*	$p \wedge q \equiv q \wedge p$	$p \vee q \equiv q \vee p$
b. *Associative laws:*	$(p \wedge q) \wedge r \equiv p \wedge (q \wedge r)$	$(p \vee q) \vee r \equiv p \vee (q \vee r)$
c. *Distributive laws:*	$p \wedge (q \vee r) \equiv (p \wedge q) \vee (p \wedge r)$	$p \vee (q \wedge r) \equiv (p \vee q) \wedge (p \vee r)$
d. *Identity laws:*	$p \wedge \mathbf{t} \equiv p$	$p \vee \mathbf{c} \equiv p$
e. *Negation laws:*	$p \vee \neg p \equiv \mathbf{t}$	$p \wedge \neg p \equiv \mathbf{c}$
f. *Double negative law:*	$\neg(\neg p) \equiv p$	
g. *Idempotent laws:*	$p \wedge p \equiv p$	$p \vee p \equiv p$
h. *De Morgan's laws:*	$\neg(p \wedge q) \equiv \neg p \vee \neg q$	$\neg(p \vee q) \equiv \neg p \wedge \neg q$
i. *Universal bound:*	$p \vee \mathbf{t} \equiv \mathbf{t}$	$p \wedge \mathbf{c} \equiv \mathbf{c}$
j. *Absorption:*	$p \vee (p \wedge q) \equiv p$	$p \wedge (p \vee q) \equiv p$
k. *Negations of* ***t*** *and* ***c****:*	$\neg \mathbf{t} \equiv \mathbf{c}$	$\neg \mathbf{c} \equiv \mathbf{t}$