## 1 Logical Equivalences

$p \wedge True \equiv p \equiv p \vee False$	identity
$p \lor T \equiv T$	
$p \wedge F \equiv F$	domination
$p \lor p \equiv p$	
$p \wedge p \equiv p$	idempotent
$\neg(\neg p) \equiv p$	double negation
$p \lor q \equiv q \lor p$	
$p \wedge q \equiv q \wedge p$	commutative
$(p \lor q) \lor r \equiv p \lor (q \lor r)$	associative
$p \lor (q \land r) \equiv (p \lor q) \land (p \lor r)$	
$p \land (q \lor r) \equiv (p \land q) \lor (p \land r)$	distributive