Rules of Inference	
Modus Ponens	$p \to q$ p $\therefore q$
Modus Tollens	$p \to q$ $\sim q$ $\therefore \sim p$
Generalization (a)	p $\therefore p \vee q$
Generalization (b)	q $\therefore p \vee q$
Specialization (a)	$p \wedge q$ $\therefore p$
Specialization (b)	$p \wedge q$ $\therefore q$
Conjunction	p q $\therefore p \wedge q$
Elimination (a)	$p \vee q$ $\sim q$ $\therefore p$
Elimination (b)	$p \vee q$ $\sim p$ $\therefore q$
Transitivity	$p \to q$ $q \to r$ $\therefore p \to r$
Proof by Division into Cases	$p \vee q$ $p \to r$ $q \to r$ $\therefore r$
Contradiction Rule	$\sim p \to c$ $\therefore p$