

<u>Modus Ponens</u> $\frac{p \rightarrow q \quad p}{\therefore q}$	<u>Modus Tollens</u> $\frac{p \rightarrow q \quad \sim q}{\therefore \sim p}$	<u>Conjunction</u> $\frac{p \quad q}{\therefore p \wedge q}$	<u>Transitivity</u> $\frac{p \rightarrow q \quad q \rightarrow r}{\therefore p \rightarrow r}$
<u>Elimination</u> $\frac{p \vee q \quad \sim q}{\therefore p}$		<u>Generalization</u> $\frac{p}{\therefore p \vee q}$	
<u>Specialization</u> $\frac{p \wedge q}{\therefore p}$	$\frac{p \wedge q}{\therefore q}$	<u>Contradiction rule</u> $\frac{\sim p \rightarrow c}{\therefore p}$	<u>Proof by division into cases</u> $\frac{p \vee q \quad p \rightarrow r \quad q \rightarrow r}{\therefore r}$