

name	symbol	English	type	association	introduction	elimination
verum	\top	true	null	none	$\frac{\text{cælum}}{\top}$	$\frac{\top}{p \vee \neg p}$
falsum	\perp	false	null	none	$\frac{p \wedge \neg p}{\perp}$	$\frac{\neg p}{p \rightarrow \perp} \quad \frac{\perp}{p}$
negation	\neg	not	unary	right	$\frac{\left[\frac{p}{\perp} \right]}{\neg p}$	$\frac{\left[\frac{\neg p}{\perp} \right]}{p} \quad \frac{\neg \neg p}{p}$
conjunction	\wedge	and	binary	left	$\frac{p \quad q}{p \wedge q}$	$\frac{p \wedge q}{p} \quad \frac{p \wedge q}{q}$
disjunction	\vee	or	binary	left	$\frac{p}{p \vee q} \quad \frac{q}{p \vee q}$	$\frac{p \vee q \quad \neg q}{p} \quad \frac{\neg p \quad p \vee q}{q}$
condition	\leftarrow	if	binary	left	$\frac{\left[\frac{q}{p} \right]}{p \leftarrow q}$	$\frac{p \leftarrow q \quad q}{p}$
implication	\rightarrow	if/then	binary	right	$\frac{\left[\frac{p}{q} \right]}{p \rightarrow q}$	$\frac{p \quad p \rightarrow q}{q}$
equivalence	\leftrightarrow	if and only if	binary	none	$\frac{p \leftarrow q \quad p \rightarrow q}{p \leftrightarrow q}$	$\frac{p \leftrightarrow q}{p \leftarrow q} \quad \frac{p \leftrightarrow q}{p \rightarrow q}$

Table 1.

A table of rules for “natural deduction,” intended to be usable as an everyday, complete, sound system of logic, aesthetically including all “natural” rules and none that are unnatural or unnecessary. The rules are listed (roughly in order of precedence) in terms of “introducing” or “eliminating” the special logical symbols which are named and listed with a *type* indicating the number of operands and an *association*, a preferential direction of grouping the operands. Premises are above and conclusions are below a horizontal line. Square brackets enclose a portion of a proof or a “sub-proof” whose suppositions or assumptions are discharged when it is introduced into the main proof.