Deducción Natural

Lógica Intuicionista

Reglas Básicas

$$\frac{\Gamma, \tau \vdash \tau}{\Gamma, \tau \vdash \tau} ax$$
 $\frac{\Gamma \vdash \bot}{\Gamma \vdash \tau} \bot_e$

$$\frac{\Gamma \vdash \tau}{\Gamma \vdash \tau \land \sigma} \land_{i} \qquad \frac{\Gamma, \tau \vdash \sigma}{\Gamma \vdash \tau \Rightarrow \sigma} \Rightarrow_{i}$$

$$\frac{\Gamma \vdash \tau \land \sigma}{\Gamma \vdash \tau} \land_{e_{1}} \qquad \frac{\Gamma \vdash \tau \land \sigma}{\Gamma \vdash \sigma} \land_{e_{2}}$$

$$\frac{\Gamma \vdash \tau}{\Gamma \vdash \tau} \lor_{\sigma} \lor_{i_{1}} \qquad \frac{\Gamma \vdash \sigma}{\Gamma \vdash \tau \lor \sigma} \lor_{i_{2}}$$

$$\frac{\Gamma \vdash \tau \lor \sigma}{\Gamma \vdash \tau} \lor_{\sigma} \qquad \frac{\Gamma, \tau \vdash \rho}{\Gamma, \sigma \vdash \rho} \lor_{e}$$

$$\frac{\Gamma \vdash \tau \lor \sigma}{\Gamma \vdash \rho} \lor_{e} \qquad \frac{\Gamma, \tau \vdash \sigma}{\Gamma \vdash \tau} \lnot_{e}$$

Reglas Derivadas

$$\frac{\Gamma \vdash \tau}{\Gamma \vdash \neg \neg \tau} \neg \neg_{i} \qquad \frac{\Gamma \vdash \tau \Rightarrow \sigma \quad \Gamma \vdash \neg \sigma}{\Gamma \vdash \neg \tau} MT$$

Lógica Clásica

Regla Básica Reglas Derivadas

$$\frac{\Gamma \vdash \neg \neg \tau}{\Gamma \vdash \tau} \neg \neg_{e} \qquad \frac{\Gamma, \neg \tau \vdash \bot}{\Gamma \vdash \tau} PBC \qquad \overline{\Gamma \vdash \tau \vee \neg \tau} LEM$$

 $\frac{\Gamma \vdash \tau \qquad \Gamma \vdash \neg \tau}{\Gamma \vdash \bot} \neg_e$