

Рачун секвената LK

Аксиоме

$$\frac{}{\perp \vdash} (\perp_L) \quad \frac{}{\alpha \vdash \alpha} (\text{ax})$$

Структурна правила

$$\begin{array}{ll} \frac{\Gamma \vdash \Delta}{\Gamma, \alpha \vdash \Delta} (s_L) & \frac{\Gamma \vdash \Delta}{\Gamma \vdash \alpha, \Delta} (s_D) \\ \frac{\Gamma, \alpha, \alpha \vdash \Delta}{\Gamma, \alpha \vdash \Delta} (k_L) & \frac{\Gamma \vdash \alpha, \alpha, \Delta}{\Gamma \vdash \alpha, \Delta} (k_D) \\ \frac{\Gamma, \alpha, \beta, \Gamma' \vdash \Delta}{\Gamma, \beta, \alpha, \Gamma' \vdash \Delta} (p_L) & \frac{\Gamma \vdash \Delta, \alpha, \beta, \Delta'}{\Gamma \vdash \Delta, \beta, \alpha, \Delta'} (p_D) \end{array}$$

Логичка правила

$$\begin{array}{ll} \frac{\Gamma, \alpha, \beta \vdash \Delta}{\Gamma, \alpha \wedge \beta \vdash \Delta} (\wedge_L) & \frac{\Gamma \vdash \alpha, \Delta \quad \Gamma \vdash \beta, \Delta}{\Gamma \vdash \alpha \wedge \beta, \Delta} (\wedge_D) \\ \frac{\Gamma, \alpha \vdash \Delta \quad \Gamma, \beta \vdash \Delta}{\Gamma, \alpha \vee \beta \vdash \Delta} (\vee_L) & \frac{\Gamma \vdash \alpha, \beta, \Delta}{\Gamma \vdash \alpha \vee \beta, \Delta} (\vee_D) \\ \frac{\Gamma \vdash \alpha, \Delta \quad \Gamma, \beta \vdash \Delta}{\Gamma, \alpha \Rightarrow \beta \vdash \Delta} (\Rightarrow_L) & \frac{\Gamma, \alpha \vdash \beta, \Delta}{\Gamma \vdash \alpha \Rightarrow \beta, \Delta} (\Rightarrow_D) \\ \frac{\Gamma \vdash \alpha, \Delta}{\Gamma, \neg \alpha \vdash \Delta} (\neg_L) & \frac{\Gamma, \alpha \vdash \Delta}{\Gamma \vdash \neg \alpha, \Delta} (\neg_D) \\ \frac{\Gamma, \alpha[x := t] \vdash \Delta}{\Gamma, \forall x \alpha \vdash \Delta} (\forall_L) & \frac{\Gamma \vdash \alpha, \Delta \quad x \text{ није слободно у } \Gamma, \Delta}{\Gamma \vdash \forall x \alpha, \Delta} (\forall_D) \\ \frac{\Gamma, \alpha \vdash \Delta \quad x \text{ није слободно у } \Gamma, \Delta}{\Gamma, \exists x \alpha \vdash \Delta} (\exists_L) & \frac{\Gamma \vdash \alpha[x := t], \Delta}{\Gamma \vdash \exists x \alpha, \Delta} (\exists_D) \end{array}$$

Сечење

$$\frac{\Gamma \vdash \alpha, \Delta \quad \Gamma', \alpha \vdash \Delta'}{\Gamma, \Gamma' \vdash \Delta, \Delta'} (\text{cut})$$