

Reguły dedukcji naturalnej

wprowadzanie

$$\wedge \quad \frac{\varphi \quad \psi}{\varphi \wedge \psi} (\wedge i)$$

$$\vee \quad \frac{\varphi}{\varphi \vee \psi} (\vee i1) \quad \frac{\psi}{\varphi \vee \psi} (\vee i2)$$

$$\rightarrow \quad \frac{\begin{array}{c} \varphi \\ \dots \\ \psi \end{array}}{\varphi \rightarrow \psi} (\rightarrow i)$$

$$\neg \quad \frac{\begin{array}{c} \varphi \\ \dots \\ \perp \end{array}}{\neg \varphi} (\neg i)$$

$\perp$ brak

$\neg\neg$ reguła pochodna

eliminacja

$$\frac{\varphi \wedge \psi}{\varphi} (\wedge e1) \quad \frac{\varphi \wedge \psi}{\psi} (\wedge e2)$$

$$\frac{\varphi \vee \psi \quad \begin{array}{|c|} \hline \varphi \\ \dots \\ \chi \end{array} \quad \begin{array}{|c|} \hline \psi \\ \dots \\ \chi \end{array}}{\chi} (\vee e)$$

$$\frac{\varphi \quad \varphi \rightarrow \psi}{\psi} (\rightarrow e)$$

$$\frac{\varphi \quad \neg \varphi}{\perp} (\neg e)$$

$$\frac{\perp}{\varphi} (\perp e)$$

$$\frac{\neg\neg\varphi}{\varphi} (\neg\neg e)$$