



Up Help

prop, $\ast \Rightarrow \ast$, A1, A2, A3, MP, PropositionalCalculus, AutoImPLY,

prop

[prop $\xrightarrow{\text{pyk}}$ “prop”]

$\ast \Rightarrow \ast$

[$x \Rightarrow y \xrightarrow{\text{val}} y : \text{If}(\ast, y, \top)$]

[$x \Rightarrow y \xrightarrow{\text{tex}}$ “#1.
\Rightarrow{}\{ \} #2.”]

[$x \Rightarrow y \xrightarrow{\text{pyk}}$ “ $\ast$ imply $\ast$ ”]

A1

[A1 $\xrightarrow{\text{proof}}$ Rule tactic]

[A1 $\xrightarrow{\text{stmt}}$ PropositionalCalculus $\vdash \forall \underline{b}: \forall \underline{c}: [\underline{b} \Rightarrow [\underline{c} \Rightarrow \underline{b}]]$]

[A1 $\xrightarrow{\text{tex}}$ “A1”]

[A1 $\xrightarrow{\text{pyk}}$ “axiom one”]

A2

[A2 $\xrightarrow{\text{proof}}$ Rule tactic]

[A2 $\xrightarrow{\text{stmt}}$ PropositionalCalculus $\vdash \forall \underline{b}: \forall \underline{c}: \forall \underline{d}: [[\underline{b} \Rightarrow [\underline{c} \Rightarrow \underline{d}]] \Rightarrow [[\underline{b} \Rightarrow \underline{c}] \Rightarrow [\underline{b} \Rightarrow \underline{d}]]]$]

[A2 $\xrightarrow{\text{tex}}$ “A2”]

[A2 $\xrightarrow{\text{pyk}}$ “axiom two”]

A3

[A3 $\xrightarrow{\text{proof}}$ Rule tactic]

[A3 $\xrightarrow{\text{stmt}}$ PropositionalCalculus $\vdash \forall \underline{b}: \forall \underline{c}: [[[\neg \underline{c}] \Rightarrow \neg \underline{b}] \Rightarrow [[[\neg \underline{c}] \Rightarrow \underline{b}] \Rightarrow \underline{c}]]]$]

[A3 $\xrightarrow{\text{tex}}$ “A3”]

[A3 $\xrightarrow{\text{pyk}}$ “axiom three”]

MP

[MP $\xrightarrow{\text{proof}}$ Rule tactic]

[MP $\xrightarrow{\text{stmt}}$ PropositionalCalculus $\vdash \forall \underline{b}: \forall \underline{c}: [\underline{b} \vdash [[\underline{b} \Rightarrow \underline{c}] \vdash \underline{c}]]]$

[MP $\xrightarrow{\text{tex}}$ “MP”]

[MP $\xrightarrow{\text{pyk}}$ “mp”]

PropositionalCalculus

[PropositionalCalculus $\xrightarrow{\text{stmt}}$ $[\forall \underline{b}: \forall \underline{c}: \forall \underline{d}: [[\underline{b} \Rightarrow [\underline{c} \Rightarrow \underline{d}]] \Rightarrow [[\underline{b} \Rightarrow \underline{c}] \Rightarrow [\underline{b} \Rightarrow \underline{d}]]]] \oplus [[\forall \underline{b}: \forall \underline{c}: [\underline{b} \vdash [[\underline{b} \Rightarrow \underline{c}] \vdash \underline{c}]]] \oplus [[\forall \underline{b}: \forall \underline{c}: [\underline{b} \Rightarrow [\underline{c} \Rightarrow \underline{b}]]] \oplus \forall \underline{b}: \forall \underline{c}: [[[\neg \underline{c}] \Rightarrow \neg \underline{b}] \Rightarrow [[[\neg \underline{c}] \Rightarrow \underline{b}] \Rightarrow \underline{c}]]]]$]

[PropositionalCalculus $\xrightarrow{\text{tex}}$ “Propositional Calculus”]

[PropositionalCalculus $\xrightarrow{\text{pyk}}$ “prop theory”]

AutoImPLY

[AutoImPLY $\xrightarrow{\text{proof}}$ $\lambda c. \lambda x. \mathcal{P}([\text{PropositionalCalculus} \vdash \forall \underline{b}: [[\text{A1} \gg [\underline{b} \Rightarrow [\underline{b} \Rightarrow \underline{b}]]] ; [[\text{A2} \gg [[\underline{b} \Rightarrow [[\underline{b} \Rightarrow \underline{b}] \Rightarrow \underline{b}]] \Rightarrow [[\underline{b} \Rightarrow [\underline{b} \Rightarrow \underline{b}]]] \Rightarrow [\underline{b} \Rightarrow \underline{b}]]] ; [[\text{A1} \gg [\underline{b} \Rightarrow [[\underline{b} \Rightarrow \underline{b}] \Rightarrow \underline{b}]]] ; [[[\text{MP} \triangleright [\underline{b} \Rightarrow [[\underline{b} \Rightarrow \underline{b}] \Rightarrow \underline{b}]]] \triangleright [[\underline{b} \Rightarrow [[\underline{b} \Rightarrow \underline{b}] \Rightarrow \underline{b}]] \Rightarrow [[\underline{b} \Rightarrow [\underline{b} \Rightarrow \underline{b}]] \Rightarrow [\underline{b} \Rightarrow \underline{b}]]] \gg [[\underline{b} \Rightarrow [\underline{b} \Rightarrow \underline{b}]] \Rightarrow [\underline{b} \Rightarrow \underline{b}]]] ; [[[\text{MP} \triangleright [\underline{b} \Rightarrow [\underline{b} \Rightarrow \underline{b}]]] \triangleright [[\underline{b} \Rightarrow [\underline{b} \Rightarrow \underline{b}]] \Rightarrow [\underline{b} \Rightarrow \underline{b}]]] \gg [\underline{b} \Rightarrow \underline{b}]]]] , p_0, c)]$]

[AutoImPLY $\xrightarrow{\text{stmt}}$ PropositionalCalculus $\vdash \forall \underline{b}: [\underline{b} \Rightarrow \underline{b}]$]

[AutoImPLY $\xrightarrow{\text{tex}}$ “AutoImPLY”]

[AutoImply $\xrightarrow{\text{pyk}}$ “auto imply”]

*The pyk compiler, version 0.grue.20050502+ by Klaus Grue
GRD-2005-06-02.UTC:08:43:13.701947 = MJD-53523.TAI:08:43:45.701947 =
LGT-4624418625701947e-6*