

Logiweb codex of propcalc

Up Help

$\neg*$, propcalc, A1, A2, A3, MP, mendelson lemma one eight, Mendelson1.8,
 $* \Rightarrow *$,

$\neg*$

$[\neg x \xrightarrow{\text{tex}} \text{"\neg #1."}]$

propcalc

$[\text{propcalc} \xrightarrow{\text{stmt}} [\forall \underline{a}: \forall \underline{b}: [\underline{a} \vdash [\underline{a} \Rightarrow \underline{b}] \vdash \underline{b}]] \oplus [[\forall \underline{a}: \forall \underline{b}: \forall \underline{c}: [\underline{a} \Rightarrow [\underline{b} \Rightarrow \underline{c}]] \Rightarrow [\underline{a} \Rightarrow \underline{b}] \Rightarrow [\underline{a} \Rightarrow \underline{c}]] \oplus [[\forall \underline{a}: \forall \underline{b}: [\underline{a} \Rightarrow [\underline{b} \Rightarrow \underline{a}]] \oplus \forall \underline{a}: \forall \underline{b}: [[\neg \underline{b}] \Rightarrow \neg \underline{a}] \Rightarrow [[\neg \underline{b}] \Rightarrow \underline{a}] \Rightarrow \underline{b}]]]]]$
 $[\text{propcalc} \xrightarrow{\text{pyk}} \text{"propcalc"}]$

A1

$[A1 \xrightarrow{\text{proof}} \text{Rule tactic}]$
 $[A1 \xrightarrow{\text{stmt}} \text{propcalc} \vdash \forall \underline{a}: \forall \underline{b}: [\underline{a} \Rightarrow [\underline{b} \Rightarrow \underline{a}]]]$
 $[A1 \xrightarrow{\text{tex}} \text{"A1"}]$
 $[A1 \xrightarrow{\text{pyk}} \text{"axiom one"}]$

A2

$[A2 \xrightarrow{\text{proof}} \text{Rule tactic}]$
 $[A2 \xrightarrow{\text{stmt}} \text{propcalc} \vdash \forall \underline{a}: \forall \underline{b}: \forall \underline{c}: [[\underline{a} \Rightarrow [\underline{b} \Rightarrow \underline{c}]] \Rightarrow [\underline{a} \Rightarrow \underline{b}] \Rightarrow [\underline{a} \Rightarrow \underline{c}]]]$
 $[A2 \xrightarrow{\text{tex}} \text{"A2"}]$
 $[A2 \xrightarrow{\text{pyk}} \text{"axiom two"}]$

A3

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

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

[A3 $\xrightarrow{\text{tex}}$ “A3”]

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

MP

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

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

[MP $\xrightarrow{\text{tex}}$ “MP”]

[MP $\xrightarrow{\text{pyk}}$ “rule mp”]

mendelson lemma one eight

[mendelson lemma one eight $\xrightarrow{\text{proof}}$ $\lambda c. \lambda x. \mathcal{P}([\text{propcalc} \vdash \forall \underline{a}: [[\text{A2} \gg [[\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]] \Rightarrow [[\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]]]] ; [[\text{A1} \gg [\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]]] ; [[[\text{MP} \triangleright [\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]] \triangleright [[\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]] \Rightarrow [[\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]]]] \gg [[\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]] ; [[\text{A1} \gg [\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]]] ; [[[\text{MP} \triangleright [\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]] \triangleright [[\underline{a} \Rightarrow [[\underline{a} \Rightarrow \underline{a}] \Rightarrow \underline{a}]]] \Rightarrow [[\underline{a} \Rightarrow \underline{a}]]]]]]]]]]] , p0, c)]$

[mendelson lemma one eight $\xrightarrow{\text{stmt}}$ propcalc $\vdash \forall \underline{a}: [\underline{a} \Rightarrow \underline{a}]]$

[mendelson lemma one eight $\xrightarrow{\text{pyk}}$ “mendelson lemma one eight”]

Mendelson1.8

[Mendelson1.8 $\xrightarrow{\text{tex}}$ “Mendelson 1.8”]

[Mendelson1.8 $\xrightarrow{\text{pyk}}$ “lemma id”]

$\ast \Rightarrow \ast$

$[x \Rightarrow y \overset{\text{tex}}{\rightarrow} \text{"\#1.} \\ \backslash \text{Rightarrow}\{\} \text{"\#2."}]$

$[x \Rightarrow y \overset{\text{pyk}}{\rightarrow} \text{"\ast implies \ast"}]$

The pyk compiler, version 0.grue.20050603 by Klaus Grue
GRD-2005-06-16.UTC:21:00:55.684114 = MJD-53537.TAI:21:01:27.684114 =
LGT-4625672487684114e-6