

Logiweb codex of logik rapport

Up Help

S' , $A1'$, $A2'$, $A3'$, $A4'$, $A5'$, $S1'$, $S2'$, $S3'$, $S4'$, $S5'$, $S6'$, $S7'$, $S8'$, $S9'$, MP' , Gen' ,
logik rapport, $A2'^*$, $A1'^*$, $DoubleHypothesis$, $C1.10a$, $C1.10(b)$, $L1.8$, $L3.2(b)'$,
 $L3.2(c)'$, $L3.2(d)'$, $L3.2(f)'$, $L3.2(f)'_{BASE}$, $L3.2(f)'_{HYP}$, $L3.2(g)'$, $L3.2(g)'_{BASE}$,
 $L3.2(g)'_{HYP}$, $L3.2(h)'$, $L3.2(h)'_{BASE}$, $L3.2(h)'_{HYP}$, $L3.2h_{SWAP}$, $Tautology1$,

S'

$[S' \xrightarrow{stmt} x]$

$A1'$

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

$[A1' \xrightarrow{stmt} S' \vdash \forall \underline{a}: \forall \underline{b}: [[\underline{a} \Rightarrow \underline{b}] \Rightarrow \underline{a}]]$

$A2'$

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

$[A2' \xrightarrow{stmt} S' \vdash \forall \underline{a}: \forall \underline{b}: \forall \underline{c}: [[[[[\underline{a} \Rightarrow \underline{b}] \Rightarrow \underline{c}] \Rightarrow [\underline{a} \Rightarrow \underline{b}]] \Rightarrow \underline{a}] \Rightarrow \underline{c}]]]$

$A3'$

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

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

$A4'$

$[A4' \xrightarrow{proof} \text{Rule tactic}]$

$[A4' \xrightarrow{stmt} S' \vdash \forall \underline{c}: \forall \underline{a}: \forall \underline{x}: \forall \underline{b}: [[\underline{a}] \equiv \langle [\underline{b}] \mid [\underline{x}] \rangle := \langle [\underline{c}] \rangle \vdash [[\forall \underline{x}: \underline{b}] \Rightarrow \underline{a}]]]$

A5'

[A5' $\xrightarrow{\text{proof}}$ Rule tactic]

[A5' $\xrightarrow{\text{stmt}}$ $S' \vdash \forall \underline{x}: \forall \underline{a}: \forall \underline{b}: [\text{nonfree}([\underline{x}], [\underline{a}]) \vdash [[[\forall \underline{x}: [\underline{a} \Rightarrow \underline{b}]] \Rightarrow \underline{a}] \Rightarrow \forall \underline{x}: \underline{b}]]]$]

S1'

[S1' $\xrightarrow{\text{proof}}$ Rule tactic]

[S1' $\xrightarrow{\text{stmt}}$ $S' \vdash \forall \underline{a}: \forall \underline{b}: \forall \underline{c}: [[[\underline{a} \stackrel{P}{=} \underline{b}] \Rightarrow [\underline{a} \stackrel{P}{=} \underline{c}]] \Rightarrow [\underline{b} \stackrel{P}{=} \underline{c}]]]$]

S2'

[S2' $\xrightarrow{\text{proof}}$ Rule tactic]

[S2' $\xrightarrow{\text{stmt}}$ $S' \vdash \forall \underline{a}: \forall \underline{b}: [[\underline{a} \stackrel{P}{=} \underline{b}] \Rightarrow [\underline{a}' \stackrel{P}{=} [\underline{b}']]]]$]

S3'

[S3' $\xrightarrow{\text{proof}}$ Rule tactic]

[S3' $\xrightarrow{\text{stmt}}$ $S' \vdash \forall \underline{a}: \neg [\dot{0} \stackrel{P}{=} [\underline{a}']]]$]

S4'

[S4' $\xrightarrow{\text{proof}}$ Rule tactic]

[S4' $\xrightarrow{\text{stmt}}$ $S' \vdash \forall \underline{a}: \forall \underline{b}: [[\underline{a}' \stackrel{P}{=} [\underline{b}']] \Rightarrow [\underline{a} \stackrel{P}{=} \underline{b}]]]$]

S5'

[S5' $\xrightarrow{\text{proof}}$ Rule tactic]

[S5' $\xrightarrow{\text{stmt}}$ $S' \vdash \forall \underline{a}: [[\underline{a} \dot{+} \dot{0}] \stackrel{P}{=} \underline{a}]]$]

S6'

[S6' $\xrightarrow{\text{proof}}$ Rule tactic]

$$[S6' \xrightarrow{\text{stmt}} S' \vdash \forall \underline{a}: \forall \underline{b}: [[\underline{a} \dot{+} [\underline{b}']] \stackrel{p}{=} [[\underline{a} \dot{+} \underline{b}]']]]$$

S7'

$$[S7' \xrightarrow{\text{proof}} \text{Rule tactic}]$$

$$[S7' \xrightarrow{\text{stmt}} S' \vdash \forall \underline{a}: [[\underline{a} \dot{:} \dot{0}] \stackrel{p}{=} \dot{0}]]$$

S8'

$$[S8' \xrightarrow{\text{proof}} \text{Rule tactic}]$$

$$[S8' \xrightarrow{\text{stmt}} S' \vdash \forall \underline{a}: \forall \underline{b}: [[\underline{a} \dot{:} [\underline{b}']] \stackrel{p}{=} [[\underline{a} \dot{:} \underline{b}] \dot{+} \underline{a}]]]$$

S9'

$$[S9' \xrightarrow{\text{proof}} \text{Rule tactic}]$$

$$[S9' \xrightarrow{\text{stmt}} S' \vdash \forall \underline{a}: \forall \underline{b}: \forall \underline{c}: \forall \underline{x}: [\underline{b} \equiv \langle \underline{a} | \underline{x} := \dot{0} \rangle \Vdash [\underline{c} \equiv \langle \underline{a} | \underline{x} := \underline{x}' \rangle \Vdash [[\underline{b} \dot{\Rightarrow} \dot{\forall} \underline{x}: [\underline{a} \dot{\Rightarrow} \underline{c}]] \dot{\Rightarrow} \dot{\forall} \underline{x}: \underline{a}]]]]]$$

MP'

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

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

Gen'

$$[Gen' \xrightarrow{\text{proof}} \text{Rule tactic}]$$

$$[Gen' \xrightarrow{\text{stmt}} S' \vdash \forall \underline{x}: \forall \underline{a}: [\underline{a} \vdash \dot{\forall} \underline{x}: \underline{a}]]$$

logik rapport

$$[\text{logik rapport} \xrightarrow{\text{pyk}} \text{“logik rapport”}]$$

A2'*

$$[A2'^* \xrightarrow{\text{proof}} \lambda c. \lambda x. \mathcal{P}([S' \vdash \forall h: \forall a: \forall b: [[h \Rightarrow [a \Rightarrow b]]] \vdash [[A2' \gg [[h \Rightarrow [a \Rightarrow b]]] \Rightarrow [[h \Rightarrow a] \Rightarrow [h \Rightarrow b]]]]]; [[[MP' \triangleright [[h \Rightarrow [a \Rightarrow b]]]] \Rightarrow [[h \Rightarrow a] \Rightarrow [h \Rightarrow b]]]]] \triangleright [h \Rightarrow [a \Rightarrow b]] \gg [[h \Rightarrow a] \Rightarrow [h \Rightarrow b]]]], p_0, c)]$$

$$[A2'^* \xrightarrow{\text{stmt}} S' \vdash \forall h: \forall a: \forall b: [[h \Rightarrow [a \Rightarrow b]]] \vdash [[h \Rightarrow a] \Rightarrow [h \Rightarrow b]]]]]$$

$$[A2'^* \xrightarrow{\text{tex}} \text{"\{A2'\}^*"}]$$

$$[A2'^* \xrightarrow{\text{pyk}} \text{"lemma prime a two star"}]$$

A1'*

$$[A1'^* \xrightarrow{\text{proof}} \lambda c. \lambda x. \mathcal{P}([S' \vdash \forall a: \forall h: [a \vdash [[A1' \gg [a \Rightarrow [h \Rightarrow a]]]]]]; [[[MP' \triangleright [a \Rightarrow [h \Rightarrow a]]]] \triangleright a] \gg [h \Rightarrow a]]]]], p_0, c)]$$

$$[A1'^* \xrightarrow{\text{stmt}} S' \vdash \forall a: \forall h: [a \vdash [h \Rightarrow a]]]]$$

$$[A1'^* \xrightarrow{\text{tex}} \text{"\{A1'\}^*"}]$$

$$[A1'^* \xrightarrow{\text{pyk}} \text{"lemma prime a one star"}]$$

DoubleHypothesis

$$[\text{DoubleHypothesis} \xrightarrow{\text{proof}} \lambda c. \lambda x. \mathcal{P}([S' \vdash \forall a: \forall b: \forall h: [[a \Rightarrow b]] \vdash [[[A1'^* \triangleright [a \Rightarrow b]]] \gg [h \Rightarrow [a \Rightarrow b]]]]; [[A2'^* \triangleright [h \Rightarrow [a \Rightarrow b]]]] \gg [[h \Rightarrow a] \Rightarrow [h \Rightarrow b]]]]], p_0, c)]$$

$$[\text{DoubleHypothesis} \xrightarrow{\text{stmt}} S' \vdash \forall a: \forall b: \forall h: [[a \Rightarrow b]] \vdash [[h \Rightarrow a] \Rightarrow [h \Rightarrow b]]]]]$$

$$[\text{DoubleHypothesis} \xrightarrow{\text{tex}} \text{"Double Hypothesis"}]$$

$$[\text{DoubleHypothesis} \xrightarrow{\text{pyk}} \text{"lemma double hyp"}]$$

C1.10a

$$[C1.10a \xrightarrow{\text{proof}} \lambda c. \lambda x. \mathcal{P}([S' \vdash \forall b: \forall c: \forall d: [[b \Rightarrow c]] \vdash [[c \Rightarrow d]] \vdash [[A1' \gg [[c \Rightarrow d]] \Rightarrow [b \Rightarrow [c \Rightarrow d]]]]]; [[[[MP' \triangleright [[c \Rightarrow d]] \Rightarrow [b \Rightarrow [c \Rightarrow d]]]]] \triangleright [c \Rightarrow d]] \gg [b \Rightarrow [c \Rightarrow d]]]]; [[A2' \gg [[b \Rightarrow [c \Rightarrow d]]] \Rightarrow [[b \Rightarrow c] \Rightarrow [b \Rightarrow d]]]]]; [[[[MP' \triangleright [[b \Rightarrow [c \Rightarrow d]]]]] \Rightarrow [[b \Rightarrow c] \Rightarrow [b \Rightarrow d]]]]] \triangleright [b \Rightarrow [c \Rightarrow d]]] \gg [[b \Rightarrow c]]]]$$

