

ny--

```
[x << testy ^tex " #1.
```

<<test#2.”]

[<< testMacro(t) → “<<testMacro(#1.

)”]

$[x \ll \text{testy} \xrightarrow{\text{macro}} \lambda t. \lambda s. \lambda c. \ll \text{testMacro}(t^h :: \text{ExpandList}(t^t, s, c))]$

```
[<< testMacro(t)  $\xrightarrow{\text{val}}$   $\tilde{Q}(t, [x], [x] :: t^{22212122211111} :: T)$ ]
```

(*****)

1

$$\{ph \in P(\{ph \in P(\{ph \in P(\{ph \in P(Union(\{N, Q\}))) | \neg (\forall_{obj} \overline{(op1)} : \neg (\neg (\forall_{obj} \overline{(op2)} : \neg N \Rightarrow \neg (\overline{(op2)} \in Q)n) n \Rightarrow \neg (a_{Ph} = \{\{(op1), (op1)\}, \{(op1), (op2)\}\}n)n)n)n)n)n\}) \\ \neg (\neg (\forall_{obj}(r1) : (r1) \in f_{Ph} \Rightarrow \neg (\forall_{obj}(op1) : \neg (\neg (\forall_{obj}(op2) : \neg (\neg (\neg ((op1) \in N \Rightarrow$$

$\neg((\overline{op2}) \in Q)n \Rightarrow \neg(\overline{r1}) = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n\}n)n)n)n \Rightarrow$
 $\neg(\forall_{obj}(\overline{f1}): \forall_{obj}(\overline{f2}): \forall_{obj}(\overline{f3}): \forall_{obj}(\overline{f4}): \{\{(f1), (f1)\}, \{(f1), (f2)\}\} \in f_{Ph} \Rightarrow \{\{(f3), (f3)\}$
 $f_{Ph} \Rightarrow (f1) = (f3) \Rightarrow (f2) = (f4)n)n \Rightarrow \neg(\forall_{obj}(\overline{s1}): \{s1\} \in N \Rightarrow \neg(\forall_{obj}(\overline{s2}): \neg(\{\{(s1,$
 $f_{Ph}\}n)n)n)n\}) | \forall_{obj}(\overline{\epsilon}): \neg(\forall_{obj}(\overline{n}): \neg(0 < (\epsilon) \Rightarrow \neg(\neg(0 = (\epsilon))n)n)n \Rightarrow$
 $\overline{n} <= \overline{m} \Rightarrow \neg(|(\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj}(\overline{op1}): \neg(\neg(\forall_{obj}(op2): \neg$
 $N \Rightarrow \neg((\overline{op2}) \in Q)n)n \Rightarrow \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n\}n)n)n)n\}) |$
 $\neg(\forall_{obj}(\underline{m}): \neg(f_{Ph} = \{\{\underline{m}, \underline{m}\}, \{\underline{m}, (-ua[\underline{m}]\}\})n\}[\overline{m}] + (-ud_{Ph}[\overline{m}]))| <= (\epsilon) \Rightarrow$
 $\neg(\neg(|(\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj}(\overline{op1}): \neg(\neg(\forall_{obj}(\overline{op2}): \neg(\neg(\neg(\overline{N \Rightarrow \neg((\overline{op2}) \in Q)n)n \Rightarrow \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n\}n)n)n\}) |$
 $\neg(\forall_{obj}(\underline{m}): \neg(f_{Ph} = \{\{\underline{m}, \underline{m}\}, \{\underline{m}, (-ua[\underline{m}]\}\})n\}[\overline{m}] + (-ud_{Ph}[\overline{m}]))| = (\overline{\epsilon})n)n)n\})$
 3
 $\{ph \in P(\{ph \in P(\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj}(\overline{op1}): \neg(\neg(\forall_{obj}(\overline{op2}): \neg$
 $N \Rightarrow \neg((\overline{op2}) \in Q)n)n \Rightarrow \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n\}n)n)n\}) |$
 $\neg(\neg(\forall_{obj}(r1): (r1) \in f_{Ph} \Rightarrow \neg(\forall_{obj}(\overline{op1}): \neg(\neg(\forall_{obj}(op2): \neg(\neg(\neg((op1) \in N \Rightarrow$
 $\neg((\overline{op2}) \in Q)n)n \Rightarrow \neg(\overline{r1}) = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n\}n)n)n\}) |$
 $\neg(\forall_{obj}(\overline{f1}): \forall_{obj}(\overline{f2}): \forall_{obj}(\overline{f3}): \forall_{obj}(\overline{f4}): \{\{(f1), (f1)\}, \{(f1), (f2)\}\} \in f_{Ph} \Rightarrow \{\{(f3), (f3)\}$
 $f_{Ph} \Rightarrow (f1) = (f3) \Rightarrow (f2) = (f4)n)n \Rightarrow \neg(\forall_{obj}(\overline{s1}): \{s1\} \in N \Rightarrow \neg(\forall_{obj}(\overline{s2}): \neg(\{\{(s1,$
 $f_{Ph}\}n)n)n\}) | \forall_{obj}(\overline{\epsilon}): \neg(\forall_{obj}(\overline{n}): \neg(0 < (\epsilon) \Rightarrow \neg(\neg(0 = (\epsilon))n)n)n \Rightarrow$
 $\overline{n} <= \overline{m} \Rightarrow \neg(|(\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj}(\overline{op1}): \neg(\neg(\forall_{obj}(\overline{op2}): \neg$
 $N \Rightarrow \neg((\overline{op2}) \in Q)n)n \Rightarrow \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n\}n)n)n\}) |$
 $\neg(\forall_{obj}(\underline{m}): \neg(f_{Ph} = \{\{\underline{m}, \underline{m}\}, \{\underline{m}, (-ua[\underline{m}]\}\})n\}[\overline{m}] + (-ud_{Ph}[\overline{m}]))| <= (\epsilon) \Rightarrow$
 $\neg(\neg(|(\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj}(\overline{op1}): \neg(\neg(\forall_{obj}(\overline{op2}): \neg(\neg(\neg(\overline{N \Rightarrow \neg((\overline{op2}) \in Q)n)n \Rightarrow \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n\}n)n)n\}) |$
 $\neg(\forall_{obj}(\underline{m}): \neg(f_{Ph} = \{\{\underline{m}, \underline{m}\}, \{\underline{m}, (-ua[\underline{m}]\}\})n\}[\overline{m}] + (-ud_{Ph}[\overline{m}]))| = (\overline{\epsilon})n)n)n\})$
 4

$\{ph \in P(\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj} \overline{(op1)} : \neg(\neg(\forall_{obj} \overline{(op2)} : \neg(\neg(\forall_{obj} \overline{(op2)} : \neg((\overline{(op2)} \in Q)n))n) | \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n)n)n)n)n)n\})\}$
 $\neg(\neg(\forall_{obj}(r1) : (r1) \in f_{Ph} | \neg(\forall_{obj} \overline{(op1)} : \neg(\neg(\forall_{obj} \overline{(op2)} : \neg(\neg(\neg((op1) \in N | \neg((\overline{(op2)} \in Q)n)n) | \neg(r1) = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n)n)n)n)n)n) | \neg(\forall_{obj}(f1) : \forall_{obj}(f2) : \forall_{obj}(f3) : \forall_{obj}(f4) : \{\{(f1), (f1)\}, \{(f1), (f2)\}\} \in f_{Ph} | \{\{(f3), (f3)\} \in f_{Ph} | (f1) = (f3) | (f2) = (\overline{(f4)})n)n | \neg(\forall_{obj}(s1) : \{(s1) \in N | \neg(\forall_{obj}(s2) : \neg(\{\{(s1, f_{Ph})n)n)n)n) | \forall_{obj} \overline{(\epsilon)} : \neg(\forall_{obj} \overline{m} : \neg(0 < (\overline{\epsilon}) | \neg(\neg(0 = (\overline{\epsilon})n)n)n)n | \overline{n} <= \overline{m} | \neg((\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj} \overline{(op1)} : \neg(\neg(\forall_{obj} \overline{(op2)} : \neg((\overline{(op2)} \in Q)n)n) | \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n)n)n)n)n)n) | \neg(\forall_{obj} \overline{m} : \neg(f_{Ph} = \{\underline{m}, \underline{m}\}, \underline{m}, (-u\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj} \overline{(op1)} : \neg(\neg(\forall_{obj} \overline{(op2)} : \neg((\overline{(op2)} \in Q)n)n) | \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n)n)n)n)n)n) | \neg(\forall_{obj} \overline{m} : \neg(f_{Ph} = \{\underline{m}, \underline{m}\}, \underline{m}, (-ua[\underline{m}]\}))n)n\}[\underline{m}] + (-ud_{Ph}[\underline{m}])) | <= (\overline{\epsilon}) | \neg(\neg((\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj} \overline{(op1)} : \neg(\neg(\forall_{obj} \overline{(op2)} : \neg((\overline{(op2)} \in Q)n)n) | \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n)n)n)n)n)n) | \neg(\forall_{obj} \overline{m} : \neg(f_{Ph} = \{\underline{m}, \underline{m}\}, \underline{m}, (-u\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj} \overline{(op1)} : \neg(\neg(\forall_{obj} \overline{(op2)} : \neg((\overline{(op2)} \in Q)n)n) | \neg(a_{Ph} = \{\{\overline{(op1)}, \overline{(op1)}\}, \{\{\overline{(op1)}, \overline{(op2)}\}\}n)n)n)n)n)n) | \neg(\forall_{obj} \overline{m} : \neg(f_{Ph} = \{\underline{m}, \underline{m}\}, \underline{m}, (-ua[\underline{m}]\}))n)n\}[\underline{m}] + (-ud_{Ph}[\underline{m}])) | = (\overline{\epsilon})n)n)n)n) 5$

$\{ph \in P(\{ph \in P(P(Union(\{N, Q\}))) | \neg(\forall_{obj}(\overline{op1}): \neg(\forall_{obj}(\overline{op2}): \neg((\forall_{obj}(\overline{op1}), (\forall_{obj}(\overline{op2}))))) | \neg((\forall_{obj}(\overline{op1}), (\forall_{obj}(\overline{op2}))) \in Q)n) | \neg(a_{Ph} = \{\{(\overline{op1}), (\overline{op1})\}, \{(\overline{op1}), (\overline{op2})\}\}n)n)n)n)n)n)\} | \neg((\forall_{obj}(r1): (r1) \in f_{Ph}) | \neg((\forall_{obj}(\overline{op1}): \neg((\forall_{obj}(\overline{op2}): \neg((\forall_{obj}(\overline{op1}) \in N | \neg((\forall_{obj}(\overline{op2}) \in Q)n)n | \neg((r1) = \{\{(\overline{op1}), (\overline{op1})\}, \{(\overline{op1}), (\overline{op2})\}\}n)n)n)n)n)n | \neg((\forall_{obj}(f1): \forall_{obj}(f2): \forall_{obj}(f3): \forall_{obj}(f4): \{(\{f1\}, (f1)), \{(\{f1\}, (f2))\}\} \in f_{Ph}) | \{(f3), (f3)\}f_{Ph} | \{(f1) = (f3) | \{(f2) = (f4)\}n)n | \neg((\forall_{obj}(s1): (s1) \in N | \neg((\forall_{obj}(s2): \neg(\{(s1, f_{Ph})n)n)n | \forall_{obj}(\overline{\epsilon}): \neg((\forall_{obj}(\overline{n}): \neg((\forall_{obj}(\overline{m}): \neg(0 <= (\epsilon) | \neg((\neg(0 = (\epsilon))n)n)n | \neg(\overline{n} <= \overline{m} | \neg((\{ph \in P(P(Union(\{N, Q\}))) | \neg((\forall_{obj}(\overline{op1}): \neg((\forall_{obj}(\overline{op2}): \neg((\forall_{obj}(\overline{op1}), (\forall_{obj}(\overline{op2}))) \in Q)n) | \neg(a_{Ph} = \{\{(\overline{op1}), (\overline{op1})\}, \{(\overline{op1}), (\overline{op2})\}\}n)n)n)n)n)n)\} | \neg((\forall_{obj}(\overline{m}): \neg(e_{Ph} = \{\underline{m}, \underline{m}\}, \{\underline{m}, (a[\underline{m}] * b[\underline{m}])\}n)n)\}[\overline{m}] + (-ud_{Ph}[\overline{m}])) | <= (\epsilon) | \neg((\neg((\{ph \in P(P(Union(\{N, Q\}))) | \neg((\forall_{obj}(\overline{op1}): \neg((\forall_{obj}(\overline{op2}): \neg((\forall_{obj}(\overline{op1}), (\forall_{obj}(\overline{op2}))) \in Q)n) | \neg(a_{Ph} = \{\{(\overline{op1}), (\overline{op1})\}, \{(\overline{op1}), (\overline{op2})\}\}n)n)n)n)n)n)\} | \neg((\forall_{obj}(\overline{m}): \neg(e_{Ph} = \{\underline{m}, \underline{m}\}, \{\underline{m}, (a[\underline{m}] * b[\underline{m}])\}n)n)\}[\overline{m}] + (-ud_{Ph}[\overline{m}])) | = (\epsilon)n)n)\}$

$\neg(\forall_{\text{obj}} \underline{\mathbf{m}} : \neg(e_{\text{Ph}} = \{\underline{\mathbf{m}}, \underline{\mathbf{m}}\}, \{\underline{\mathbf{m}}, ((\text{fx})[\underline{\mathbf{m}}] * \{ph \in P(P(\text{Union}(\{N, Q\}))) | \neg(\forall_{\text{obj}} (\overline{\text{op}1}) : \neg(\neg(\forall_{\text{obj}} (\overline{\text{op}2}) : \neg(\neg(\neg(\overline{(\text{op}1)} \in N \Rightarrow \overline{(\text{op}2)} \in Q)n)n \Rightarrow \neg(a_{\text{Ph}} = \{\{(op1), (op1)\}, \{\overline{(op1)}, (op2)\}\}n)n)n)n)n) | \neg(\forall_{\text{obj}} (\text{crs}1) : \neg(c_{\text{Ph}} = \{\{\text{crs}1\}, (crs1) (-ud_{\text{Ph}}[\overline{\mathbf{m}}]))| <= (\epsilon) \Rightarrow \neg(\neg(|\{ph \in P(P(\text{Union}(\{N, Q\}))) | \neg(\forall_{\text{obj}} (\overline{\text{op}1}) : \neg((op2) \in Q)n) \Rightarrow \neg(a_{\text{Ph}} = \{\{(op1), (op1)\}, \{\overline{(op1)}, (op2)\}\}n)n)n)n)n)n) | \neg(\forall_{\text{obj}} \underline{\mathbf{m}} : \neg(e_{\text{Ph}} = \{\underline{\mathbf{m}}, \underline{\mathbf{m}}\}, \{\underline{\mathbf{m}}, ((\text{fx})[\underline{\mathbf{m}}] * \{ph \in P(P(\text{Union}(\{N, Q\}))) | \neg(\forall_{\text{obj}} (\overline{\text{op}1}) : \neg(\neg(\forall_{\text{obj}} (\overline{\text{op}2}) : \neg(\neg(\neg(\overline{(\text{op}1)} \in N \Rightarrow \overline{(\text{op}2)} \in Q)n)n \Rightarrow \neg(a_{\text{Ph}} = \{\{(op1), (op1)\}, \{\overline{(op1)}, (op2)\}\}n)n)n)n)n) | \neg(\forall_{\text{obj}} (\text{crs}1) : \neg(c_{\text{Ph}} = \{\{\text{crs}1\}, (crs1) (-ud_{\text{Ph}}[\overline{\mathbf{m}}]))| = (\epsilon)n)n)n)n)n) 8b$

$$\begin{aligned} & \neg (\forall_{\text{obj}} \overline{(f1)} : \forall_{\text{obj}} \overline{(f2)} : \forall_{\text{obj}} \overline{(f3)} : \forall_{\text{obj}} \overline{(f4)} : \{\{\overline{(f1)}, \overline{(f1)}\}, \{\overline{(f1)}, \overline{(f2)}\}\} \in f_{\text{Ph}} \Rightarrow \{\{\overline{(f3)}, \overline{(f3)}\}, \\ & f_{\text{Ph}} \Rightarrow \overline{(f1)} = \overline{(f3)} \Rightarrow \overline{(f2)} = \overline{(f4)})n) n \Rightarrow \neg (\forall_{\text{obj}} \overline{(s1)} : \overline{(s1)} \in N \Rightarrow \neg (\forall_{\text{obj}} \overline{(s2)} : \neg (\{\{\overline{(s1)}, \\ & f_{\text{Ph}}\}n)n)n) \}) \mid \forall_{\text{obj}} \overline{(\epsilon)} : \neg (\forall_{\text{obj}} \overline{n} : \neg (\forall_{\text{obj}} \overline{m} : \neg (0 <= \overline{(\epsilon)} \Rightarrow \neg (\neg (0 = \overline{(\epsilon)})n)n) n \Rightarrow \\ & \overline{n} <= \overline{m} \Rightarrow \neg (|(a[\overline{m}] + (-ud_{\text{Ph}}[\overline{m}]))| <= \overline{(\epsilon)} \Rightarrow \neg (\neg (|(a[\overline{m}] + (-ud_{\text{Ph}}[\overline{m}]))| = \\ & \overline{(\epsilon)})n)n)n)n)n) 12 \end{aligned}$$

$$\dot{\neg}(\forall_{\text{obj}}(\overline{\epsilon}): \dot{\neg}(\dot{\neg}(\forall_{\text{obj}}\bar{n}: \dot{\neg}(\forall_{\text{obj}}\bar{m}: \dot{\neg}(\dot{\neg}(0 <= \overline{(\epsilon)} \Rightarrow \dot{\neg}(\dot{\neg}(0 = \overline{(\epsilon)})n)n)n \Rightarrow \dot{\neg}(\bar{n} <= \bar{m} \Rightarrow a[\bar{m}] <= (b[\bar{m}] + (-u(\overline{(\epsilon)})))n)n)n)n)n) 14$$

b 15

venter—

[prove $\xrightarrow{\text{prio}}$

Preassociative

[prove], [base], [bracket * end bracket], [big bracket * end bracket], [\$ * \$],
[flush left [*]], [x], [y], [z], [[* \bowtie *]], [[* \rightarrow *]], [pyk], [tex], [name], [prio], [*], [T],
[if(*, *, *)], [[* \Rightarrow *]], [val], [claim], [\perp], [f(*)], [(*)^T], [F], [0], [1], [2], [3], [4], [5], [6],
[7], [8], [9], [0], [1], [2], [3], [4], [5], [6], [7], [8], [9], [a], [b], [c], [d], [e], [f], [g], [h], [i], [j],
[k], [l], [m], [n], [o], [p], [q], [r], [s], [t], [u], [v], [w], [(*)^M], [If(*, *, *)],
[array{*} * end array], [l], [c], [r], [empty], [[* * := *]], [M(*)], [\tilde{U} (*)], [\mathcal{U} (*)],
[\mathcal{U} ^M(*), [apply(*, *)], [apply₁(*, *)], [identifier(*)], [identifier₁(*, *)], [array-
plus(*, *)], [array-remove(*, *, *)], [array-put(*, *, *, *)], [array-add(*, *, *, *, *)],
[bit(*, *)], [bit₁(*, *)], [rack], ["vector"], ["bibliography"], ["dictionary"],
["body"], ["codex"], ["expansion"], ["code"], ["cache"], ["diagnose"], ["pyk"],
["tex"], ["texname"], ["value"], ["message"], ["macro"], ["definition"],
["unpack"], ["claim"], ["priority"], ["lambda"], ["apply"], ["true"], ["if"],
["quote"], ["proclaim"], ["define"], ["introduce"], ["hide"], ["pre"], ["post"],
[\mathcal{E} (*, *, *), [\mathcal{E}_2 (*, *, *, *, *)], [\mathcal{E}_3 (*, *, *, *)], [\mathcal{E}_4 (*, *, *, *)], [lookup(*, *, *)],
[abstract(*, *, *, *)], [[*]], [M(*, *, *)], [\mathcal{M}_2 (*, *, *, *)], [\mathcal{M}^* (*, *, *)], [macro],
[s₀], [zip(*, *)], [assoc₁(*, *, *)], [(*)^P], [self], [[* \doteq *]], [[* \doteqdot *]], [[* $\doteqdot\doteq$ *]],
[[* $\stackrel{\text{Pyk}}{=}$ *]], [[* $\stackrel{\text{tex}}{=}$ *]], [[* $\stackrel{\text{name}}{=}$ *]], [**Priority table***], [$\tilde{\mathcal{M}}_1$], [$\tilde{\mathcal{M}}_2$ (*)], [$\tilde{\mathcal{M}}_3$ (*)],
[$\tilde{\mathcal{M}}_4$ (*, *, *, *)], [\mathcal{M} (*, *, *)], [\mathcal{Q} (*, *, *)], [$\tilde{\mathcal{Q}}_2$ (*, *, *)], [$\tilde{\mathcal{Q}}_3$ (*, *, *, *)], [$\tilde{\mathcal{Q}}^*$ (*, *, *)],
[[*]], [[*]], [display(*)], [statement(*)], [[*]], [[*⁻]], [**aspect**(*, *)],
[**aspect**(*, *, *)], [[*]], [**tuple**₁(*), [**tuple**₂(*), [let₂(*, *)], [let₁(*, *)],
[[* $\stackrel{\text{claim}}{=}$ *]], [checker], [check(*, *)], [check₂(*, *, *)], [check₃(*, *, *)],
[check^{*}(*, *)], [check₂^{*}(*, *, *)], [[*[.]]], [[*⁻]], [[*^o]], [msg], [[* $\stackrel{\text{msg}}{=}$ *]], [<stmt>],
[stmt], [[* $\stackrel{\text{stmt}}{=}$ *]], [HeadNil'], [HeadPair'], [Transitivity'], [\perp], [Contra'], [T'_E],

$[L_1]$, $[*]$, $[\mathcal{A}]$, $[\mathcal{B}]$, $[\mathcal{C}]$, $[\mathcal{D}]$, $[\mathcal{E}]$, $[\mathcal{F}]$, $[\mathcal{G}]$, $[\mathcal{H}]$, $[\mathcal{I}]$, $[\mathcal{J}]$, $[\mathcal{K}]$, $[\mathcal{L}]$, $[\mathcal{M}]$, $[\mathcal{N}]$, $[\mathcal{O}]$, $[\mathcal{P}]$, $[\mathcal{Q}]$, $[\mathcal{R}]$, $[\mathcal{S}]$, $[\mathcal{T}]$, $[\mathcal{U}]$, $[\mathcal{V}]$, $[\mathcal{W}]$, $[\mathcal{X}]$, $[\mathcal{Y}]$, $[\mathcal{Z}]$, $[(*|*:=*)]$, $[(*|*:=*)]$, $[\emptyset]$, [Remainder], $[(*)^{\vee}]$, [intro(*, *, *, *)], [intro(*, *, *)], [error(*, *)], [error₂(*, *)], [proof(*, *, *)], [proof₂(*, *)], $[\mathcal{S}(*, *)]$, $[\mathcal{S}^{\text{I}}(*, *)]$, $[\mathcal{S}^{\triangleright}(*, *)]$, $[\mathcal{S}_1^{\triangleright}(*, *, *)]$, $[\mathcal{S}^{\text{E}}(*, *)]$, $[\mathcal{S}_1^{\text{E}}(*, *, *)]$, $[\mathcal{S}^+(*, *)]$, $[\mathcal{S}_1^+(*, *, *)]$, $[\mathcal{S}^-(*, *)]$, $[\mathcal{S}_1^-(*, *, *)]$, $[\mathcal{S}^*(*, *)]$, $[\mathcal{S}_1^*(*, *, *)]$, $[\mathcal{S}_2^*(*, *, *, *)]$, $[\mathcal{S}^{\text{@}}(*, *)]$, $[\mathcal{S}_1^{\text{@}}(*, *, *)]$, $[\mathcal{S}^{\vdash}(*, *)]$, $[\mathcal{S}_1^{\vdash}(*, *, *, *)]$, $[\mathcal{S}^{\#}(*, *)]$, $[\mathcal{S}_1^{\#}(*, *, *, *)]$, $[\mathcal{S}^{\text{i.e.}}(*, *)]$, $[\mathcal{S}_1^{\text{i.e.}}(*, *, *, *)]$, $[\mathcal{S}_2^{\text{i.e.}}(*, *, *, *, *)]$, $[\mathcal{S}^{\forall}(*, *)]$, $[\mathcal{S}_1^{\forall}(*, *, *, *)]$, $[\mathcal{S}^{\text{;}}(*, *)]$, $[\mathcal{S}_1^{\text{;}}(*, *, *)]$, $[\mathcal{S}_2^{\text{;}}(*, *, *, *)]$, $[\mathcal{T}(*)]$, [claims(*, *, *)], [claims₂(*, *, *)], [$<\text{proof}>$], [proof], [[Lemma *: \ast]], [[Proof of *: \ast]], [[* lemma *: \ast]], [[* antilemma *: \ast]], [[* rule *: \ast]], [[* antirule *: \ast]], [verifier], $[\mathcal{V}_1(*)]$, $[\mathcal{V}_2(*, *)]$, $[\mathcal{V}_3(*, *, *, *)]$, $[\mathcal{V}_4(*, *)]$, $[\mathcal{V}_5(*, *, *, *)]$, $[\mathcal{V}_6(*, *, *, *, *)]$, $[\mathcal{V}_7(*, *, *, *)]$, [Cut(*, *)], [Head _{\oplus} (*), [Tail _{\oplus} (*), [rule₁(*, *)], [rule(*, *)], [Rule tactic], [Plus(*, *)], [[Theory *]], [theory₂(*, *)], [theory₃(*, *)], [theory₄(*, *, *)], [HeadNil"], [HeadPair"], [Transitivity"], [Contra"], [T_E], [ragged right], [ragged right expansion], [parm(*, *, *)], [parm^{*}(*, *, *)], [inst(*, *)], [inst^{*}(*, *)], [occur(*, *, *)], [occur^{*}(*, *, *)], [unify(* = *, *)], [unify^{*}(* = *, *)], [unify₂(* = *, *)], $[\mathcal{L}_a]$, $[\mathcal{L}_b]$, $[\mathcal{L}_c]$, $[\mathcal{L}_d]$, $[\mathcal{L}_e]$, $[\mathcal{L}_f]$, $[\mathcal{L}_g]$, $[\mathcal{L}_h]$, $[\mathcal{L}_i]$, $[\mathcal{L}_j]$, $[\mathcal{L}_k]$, $[\mathcal{L}_l]$, $[\mathcal{L}_m]$, $[\mathcal{L}_n]$, $[\mathcal{L}_o]$, $[\mathcal{L}_p]$, $[\mathcal{L}_q]$, $[\mathcal{L}_r]$, $[\mathcal{L}_s]$, $[\mathcal{L}_t]$, $[\mathcal{L}_u]$, $[\mathcal{L}_v]$, $[\mathcal{L}_w]$, $[\mathcal{L}_x]$, $[\mathcal{L}_y]$, $[\mathcal{L}_z]$, $[\mathcal{L}_A]$, $[\mathcal{L}_B]$, $[\mathcal{L}_C]$, $[\mathcal{L}_D]$, $[\mathcal{L}_E]$, $[\mathcal{L}_F]$, $[\mathcal{L}_G]$, $[\mathcal{L}_H]$, $[\mathcal{L}_I]$, $[\mathcal{L}_J]$, $[\mathcal{L}_K]$, $[\mathcal{L}_L]$, $[\mathcal{L}_M]$, $[\mathcal{L}_N]$, $[\mathcal{L}_O]$, $[\mathcal{L}_P]$, $[\mathcal{L}_Q]$, $[\mathcal{L}_R]$, $[\mathcal{L}_S]$, $[\mathcal{L}_T]$, $[\mathcal{L}_U]$, $[\mathcal{L}_V]$, $[\mathcal{L}_W]$, $[\mathcal{L}_X]$, $[\mathcal{L}_Y]$, $[\mathcal{L}_Z]$, $[\mathcal{L}_?]$, [Reflexivity], [Reflexivity₁], [Commutativity], [Commutativity₁], [$<\text{tactic}>$], [tactic], [[* $\stackrel{\text{tactic}}{=}$ *]], $[\mathcal{P}(*, *, *)]$, $[\mathcal{P}^*(*, *, *)]$, $[\mathcal{P}^{\text{;}}(*, *, *)]$, [p₀], [conclude₁(*, *)], [conclude₂(*, *, *)], [conclude₃(*, *, *, *)], [conclude₄(*, *)], [check], [[* $\stackrel{?}{=}$ *]], [RootVisible(*)], [A], [R], [C], [T], [L], [{*}], [*], [a], [b], [c], [d], [e], [f], [g], [h], [i], [j], [k], [l], [m], [n], [o], [p], [q], [r], [s], [t], [u], [v], [w], [x], [y], [z], [$\langle * \equiv * | * := * \rangle$], [$\langle * \equiv^0 * | * := * \rangle$], [$\langle * \equiv^1 * | * := * \rangle$], [$\langle * \equiv^* * | * := * \rangle$], [Ded(*, *)], [Ded₀(*, *)], [Ded₁(*, *, *)], [Ded₂(*, *, *)], [Ded₃(*, *, *, *)], [Ded₄(*, *, *, *)], [Ded₄^{*(*, *, *, *)], [Ded₅(*, *, *)], [Ded₆(*, *, *, *)], [Ded₆^{*(*, *, *, *)], [Ded₇(*)], [Ded₈(*, *)], [Ded₈^{*(*, *)], [S], [Neg], [MP], [Gen], [Ded], [S1], [S2], [S3], [S4], [S5], [S6], [S7], [S8], [S9], [Repetition], [A1'], [A2'], [A4'], [A5'], [Prop 3.2a], [Prop 3.2b], [Prop 3.2c], [Prop 3.2d], [Prop 3.2e₁], [Prop 3.2e₂], [Prop 3.2e], [Prop 3.2f₁], [Prop 3.2f₂], [Prop 3.2f], [Prop 3.2g₁], [Prop 3.2g₂], [Prop 3.2g], [Prop 3.2h₁], [Prop 3.2h₂], [Prop 3.2h], [Block₁(*, *, *)], [Block₂(*)], [kvanti], [UniqueMember], [UniqueMember(Type)], [SameSeries], [A4], [SameMember], [Qclosed(Addition)], [Qclosed(Multiplication)], [FromCartProd(1)], [1rule fromCartProd(2)], [constantRationalSeries(*)], [cartProd(*)], [Power(*)], [binaryUnion(*, *)], [SetOfRationalSeries], [IsSubset(*, *)], [(p*, *)], [(s*)], [(· · ·)], [Objekt-var], [Ex-var], [Ph-var], [Værdi], [Variabel], [Op(*)], [Op(*, *)], [* $\stackrel{?}{=}$ *], [ContainsEmpty(*)], [Nat(*)], [Dedu(*, *)], [Dedu₀(*, *)], [Dedu_s(*, *, *)], [Dedu₁(*, *, *)], [Dedu₂(*, *, *)], [Dedu₃(*, *, *, *)], [Dedu₄(*, *, *, *)], [Dedu₄^{*(*, *, *, *)], [Dedu₅(*, *, *)], [Dedu₆(*, *, *, *)], [Dedu₆^{*(*, *, *, *)], [Dedu₇(*)], [Dedu₈(*, *)], [Dedu₈^{*(*, *)], [Ex₁], [Ex₂], [Ex₃], [Ex₁₀], [Ex₂₀], [*_{Ex}], [*^{Ex}], [$\langle * \equiv * | * := * \rangle_{\text{Ex}}$], [$\langle * \equiv^0 * | * := * \rangle_{\text{Ex}}$], [$\langle * \equiv^1 * | * := * \rangle_{\text{Ex}}$], [$\langle * \equiv^* * | * := * \rangle_{\text{Ex}}$], [ph₁], [ph₂], [ph₃], [*_{Ph}], [*^{Ph}], [$\langle * \equiv * | * := * \rangle_{\text{Ph}}$], [$\langle * \equiv^0 * | * := * \rangle_{\text{Ph}}$], [$\langle * \equiv^1 * | * := * \rangle_{\text{Ph}}$], [$\langle * \equiv^* * | * := * \rangle_{\text{Ph}}$],}}}}}}

$\langle * \equiv * | * == \rangle_{\text{Ph}}$, $\langle * \equiv * | * == \rangle_{\text{Me}}$, $\langle * \equiv^1 * | * == \rangle_{\text{Me}}$,
 $\langle * \equiv * | * == \rangle_{\text{Me}}$, [bs] , [OBS] , $\text{[\mathcal{BS}]}$, [\emptyset] , [SystemQ] , [MP] , [Gen] , [Repetition] ,
 [Neg] , [Ded] , [ExistIntro] , [Extensionality] , $\text{[\emptyset\text{def}]}$, [PairDef] , [UnionDef] ,
 [PowerDef] , [SeparationDef] , [AddDoubleNeg] , [RemoveDoubleNeg] ,
 $\text{[AndCommutativity]}$, [AutoImply] , [Contrapositive] , [FirstConjunct] ,
 [SecondConjunct] , $\text{[FromContradiction]}$, [FromDisjuncts] , $\text{[IffCommutativity]}$,
 [IffFirst] , [IffSecond] , $\text{[ImplyTransitivity]}$, [JoinConjuncts] , [MP2] , [MP3] , [MP4] ,
 [MP5] , [MT] , [NegativeMT] , [Technicality] , [Weakening] , [WeakenOr1] ,
 [WeakenOr2] , [Formula2Pair] , [Pair2Formula] , [Formula2Union] ,
 [Union2Formula] , [Formula2Sep] , [Sep2Formula] , [Formula2Power] ,
 [SubsetInPower] , $\text{[HelperPowerIsSub]}$, [PowerIsSub] ,
 $\text{[(Switch)HelperPowerIsSub]}$, $\text{[(Switch)PowerIsSub]}$, [ToSetEquality] ,
 $\text{[HelperToSetEquality(t)]}$, $\text{[ToSetEquality(t)]}$, $\text{[HelperFromSetEquality]}$,
 [FromSetEquality] , $\text{[HelperReflexivity]}$, [Reflexivity] , [HelperSymmetry] ,
 [Symmetry] , $\text{[HelperTransitivity]}$, [Transitivity] , [ERisReflexive] ,
 [ERisSymmetric] , [ERisTransitive] , $\text{[\emptyset\text{isSubset}]}$, $\text{[HelperMemberNot\emptyset]}$,
 $\text{[MemberNot\emptyset]}$, $\text{[HelperUnique\emptyset]}$, [Unique\emptyset] , [== Reflexivity] , [== Symmetry] ,
 $\text{[Helper == Transitivity]}$, [== Transitivity] , $\text{[HelperTransferNotEq]}$,
 [TransferNotEq] , $\text{[HelperPairSubset]}$, $\text{[Helper(2)PairSubset]}$, [PairSubset] ,
 [SamePair] , [SameSingleton] , [UnionSubset] , [SameUnion] , $\text{[SeparationSubset]}$,
 [SameSeparation] , [SameBinaryUnion] , $\text{[IntersectionSubset]}$, $\text{[SameIntersection]}$,
 [AutoMember] , $\text{[HelperEqSysNot\emptyset]}$, $\text{[EqSysNot\emptyset]}$, [HelperEqSubset] ,
 [EqSubset] , $\text{[HelperEqNecessary]}$, [EqNecessary] , $\text{[HelperNoneEqNecessary]}$,
 $\text{[Helper(2)NoneEqNecessary]}$, [NoneEqNecessary] , [EqClassIsSubset] ,
 $\text{[EqClassesAreDisjoint]}$, [AllDisjoint] , $\text{[AllDisjointImply]}$, [BSsubset] ,
 $\text{[Union(BS/R)subset]}$, [UnionIdentity] , $\text{[EqSysIsPartition]}$, [(x1)] , [(x2)] , [(y1)] ,
 [(y2)] , [(v1)] , [(v2)] , [(v3)] , [(v4)] , [(v2n)] , [(m1)] , [(m2)] , [(n1)] , [(n2)] , [(n3)] , [(\epsilon)] ,
 [(\epsilon)_1] , [(\epsilon)_2] , [(fep)] , [(fx)] , [(fy)] , [(fz)] , [(fu)] , [(fv)] , [(fw)] , [(rx)] , [(ry)] , [(rz)] ,
 [(ru)] , [(sx)] , [(sx1)] , [(sy)] , [(sy1)] , [(sz)] , [(sz1)] , [(su)] , [(su1)] , [(fxs)] , [(fys)] ,
 [(crs1)] , [(f1)] , [(f2)] , [(f3)] , [(f4)] , [(op1)] , [(op2)] , [(r1)] , [(s1)] , [(s2)] , [X_1] , [X_2] ,
 [Y_1] , [Y_2] , [V_1] , [V_2] , [V_3] , [V_4] , $\text{[V_{2n}]}$, [M_1] , [M_2] , [N_1] , [N_2] , [N_3] , [\epsilon] , [\epsilon_1] , [\epsilon_2] ,
 [FX] , [FY] , [FZ] , [FU] , [FV] , [FW] , [FEP] , [RX] , [RY] , [RZ] , [RU] , [(SX)] , [(SX1)] ,
 [(SY)] , [(SY1)] , [(SZ)] , [(SZ1)] , [(SU)] , [(SU1)] , [FXS] , [FYS] , [(F1)] , [(F2)] , [(F3)] ,
 [(F4)] , [(OP1)] , [(OP2)] , [(R1)] , [(S1)] , [(S2)] , [(EPob)] , [(CRS1ob)] , [(F1ob)] ,
 [(F2ob)] , [(F3ob)] , [(F4ob)] , [(N1ob)] , [(N2ob)] , [(OP1ob)] , [(OP2ob)] , [(R1ob)] ,
 [(S1ob)] , [(S2ob)] , [ph_4] , [ph_5] , [ph_6] , [NAT] , [RATIONALSERIES] , [SERIES] ,
 [SetOfReals] , [SetOfFxs] , [N] , [Q] , [X] , [xs] , [xF] , [ysF] , [us] , [usFoelge] , [0] , [1] ,
 [(-1)] , [2] , [3] , [1/2] , [1/3] , [2/3] , [0f] , [1f] , [00] , [01] , [(- - 01)] , [02] , [01/02] ,
 [lemma plus0Left] , $\text{[lemma times1Left]}$, $\text{[lemma eqAdditionLeft]}$,
 $\text{[lemma eqMultiplicationLeft]}$, $\text{[PlusAssociativity(R)]}$,
 $\text{[PlusAssociativity(R)XX]}$, [Plus0(R)] , [Negative(R)] , [Times1(R)] ,
 [lessAddition(R)] , $\text{[PlusCommutativity(R)]}$, $\text{[LeqAntisymmetry(R)]}$,
 $\text{[LeqTransitivity(R)]}$, [leqAddition(R)] , [Distribution(R)] , [A4(Axiom)] ,
 [InductionAxiom] , [EqualityAxiom] , [EqLeqAxiom] , [EqAdditionAxiom] ,
 $\text{[EqMultiplicationAxiom]}$, $\text{[QisClosed(Reciprocal)(Imply)]}$,
 $\text{[QisClosed(Reciprocal)]}$, $\text{[QisClosed(Negative)(Imply)]}$, $\text{[QisClosed(Negative)]}$,

[leqReflexivity], [leqAntisymmetryAxiom], [leqTransitivityAxiom], [leqTotality],
 [leqAdditionAxiom], [leqMultiplicationAxiom], [plusAssociativity],
 [plusCommutativity], [Negative], [plus0], [timesAssociativity],
 [timesCommutativity], [ReciprocalAxiom], [times1], [Distribution], [0not1],
 [lemma eqLeq(R)], [TimesAssociativity(R)], [TimesCommutativity(R)],
 [lemma =f to sameF], [lemma plusF(Sym)], [lemma timesF(Sym)],
 [Separation2formula(1)], [Separation2formula(2)], [IfThenElse(T)],
 [IfThenElse(F)], [Cauchy], [PlusF], [ReciprocalF], [From ==], [To ==],
 [From <<], [to <<], [FromInR], [PlusR], [PlusR(Sym)], [TimesR],
 [TimesR(Sym)], [ReciprocalR(Axiom)], [LessMinus1(N)], [Nonnegative(N)],
 [US0], [NextXS(UpperBound)], [NextXS(NoUpperBound)],
 [NextUS(UpperBound)], [NextUS(NoUpperBound)], [ExpZero], [ExpPositive],
 [ExpZero(R)], [ExpPositive(R)], [BSzero], [BSpositive], [UStlescope(Zero)],
 [UStlescope(Positive)], [EqAddition(R)], [Unminus(R)], [FromLimit],
 [ToUpperBound], [FromUpperBound], [USisUpperBound], [0not1(R)],
 [ExpUnbounded(R)], [FromLeq(Advanced)(N)], [FromLeastUpperBound],
 [ToLeastUpperBound], [XSisNotUpperBound], [ysFGreater], [ysFLess],
 [SmallInverse], [NatType], [RationalType], [SeriesType], [Max], [Numerical],
 [MemberOfSeries(Imply)], [JoinConjuncts(2conditions)],
 [prop lemma imply negation], [TND], [FromNegatedImply], [ToNegatedImply],
 [FromNegated(2 * Imply)], [FromNegatedAnd], [FromNegatedOr],
 [ToNegatedOr], [FromNegations], [From3Disjuncts], [From2 * 2Disjuncts],
 [NegateDisjunct1], [NegateDisjunct2], [ExpandDisjuncts], [SENC1], [SENC2],
 [LessLiq(R)], [MemberOfSeries], [memberOfSeries(Type)], [<< testMacro(*)],
 [Tester1], [Tester2], [Tester3], [Tester4], [Tester5], [Tester6];

Preassociative

[*-*{}], [/indexintro(*, *, *, *)], [/intro(*, *, *)], [/bothintro(*, *, *, *, *)],
 [/nameintro(*, *, *, *)], [*'], [*[*]], [*[*→*]], [*[*⇒*]], [*0], [*1], [0b], [*-color(*)],
 [*-color*(*)], [*H], [*T], [*U], [*h], [*t], [*s], [*c], [*d], [*a], [*C], [*M], [*B], [*r], [*i],
 [*d], [*R], [*0], [*1], [*2], [*3], [*4], [*5], [*6], [*7], [*8], [*9], [*:], [*:], [*<*], [*=*], [*>*], [*?*],
 [*hide];

Preassociative

[* *"], [], [(*)t], [string(*) + *], [string(*) ++ *], [
], [], [*!*], [**], [*#*], [*\$*], [%*], [&*], [*], [(*)], [*]), [*], [*], [*], [-*], [*.*], [/*],
 [0*], [1*], [2*], [3*], [4*], [5*], [6*], [7*], [8*], [9*], [*:], [*:], [*<*], [*=*], [*>*], [*?*],
 [@*], [A*], [B*], [C*], [D*], [E*], [F*], [G*], [H*], [I*], [J*], [K*], [L*], [M*], [N*],
 [O*], [P*], [Q*], [R*], [S*], [T*], [U*], [V*], [W*], [X*], [Y*], [Z*], [*], [**], [*], [*], [*^*],
 [*_*], [**], [*a*], [*b*], [*c*], [*d*], [*e*], [*f*], [*g*], [*h*], [*i*], [*j*], [*k*], [*l*], [*m*], [*n*], [*o*],
 [*p*], [*q*], [*r*], [*s*], [*t*], [*u*], [*v*], [*w*], [*x*], [*y*], [*z*], [*], [*], [*], [*], [*~*],
 [Preassociative *; *], [Postassociative *; *], [*], [*], [priority * end],
 [newline *], [macro newline *], [MacroIndent(*)];

Preassociative

[* ' *], [* ' *];

Preassociative

[*(*exp*)];

Preassociative

[*'], [R(*)], [− R(*)], [rec*];

Preassociative

[*/*], [* ∩ *], [*[*]];

Preassociative

[∪*], [* ∪ *], [P(*)];

Preassociative

[{*}], [StateExpand(*, *, *)], [extractSeries(*)], [SetOfSeries(*)], [− − Macro(*)], [ExpandList(*, *, *)], [** Macro(*)], [+ + Macro(*)], [<< Macro(*)], [UB(*, *)], [LUB(*, *)], [BS(*, *)], [UStelescope(*, *)], [(*)], [|r *|], [Limit(*, *)], [Union(*)], [IsOrderedPair(*, *, *)], [IsRelation(*, *, *)], [isFunction(*, *, *)], [IsSeries(*, *)], [IsNatural(*, *)], [OrderedPair(*, *)], [TypeNat(*)], [TypeNat0(*)], [TypeRational(*)], [TypeRational0(*)], [TypeSeries(*, *)], [Typeseries0(*, *)];

Preassociative

[{*, *}], [⟨*, *⟩], [⟨−u*⟩], [−f*], [⟨− − *⟩], [1f/*], [1fny/*], [01//temp*];

Preassociative

[* ∈ *];

Preassociative

[* · *], [* ·₀ *], [(** *)], [* *ₙ *], [* ***];

Preassociative

[* + *], [* +₀ *], [* +₁ *], [* − *], [* −₀ *], [* −₁ *], [(+ + *)], [(− − *)], [* +ₙ *], [* −ₙ *], [* + + *], [R(*)] − R(*)];

Preassociative

[| * |], [if(*, *, *)], [Max(*, *)], [Max(*, *)];

Preassociative

[* = *], [* ≠ *], [* <= *], [* < *], [* <ₙ *], [* ≤ₙ *], [SF(*, *)], [* == *], [*!! == *], [* << *], [* <<== *], [* << test*];

Preassociative

[* ∪ {*}], [* ∪ *], [* \ {*}];

Postassociative

[* .. *], [* .. *], [* :: *], [* +₂* *], [* :: *], [* +₂* *];

Postassociative

[*, *];

Preassociative

[* ≈^B *], [* ≈^D *], [* ≈^C *], [* ≈^P *], [* ≈ *], [* = *], [* → *], [* →^t *], [* =^t*], [* =^r*], [* ∈ *], [* ⊆_T *], [* =^T*], [* =^s*], [* free in *], [* free in^{*} *], [* free for * in *], [* free for^{*} * in *], [* ∈_c *], [* < *], [* <’ *], [* ≤’ *], [* = *], [* ≠ *], [* var], [* #⁰*], [* #¹*], [* #* *], [* == *], [* ⊆ *];

Preassociative

[¬*], [¬(n)], [* ∉ *], [* ≠ *];

Preassociative

[* ∧ *], [* ḥ *], [* ḥ *], [* ∧_c *], [* ḥ *];

Preassociative

[* ∨ *], [* || *], [* ḕ *];

Postassociative

[* ḕ *];

Preassociative[$\exists * : *$], [$\forall * : *$], [$\forall_{\text{obj}} * : *$], [$\exists * : *$];**Postassociative**[* \Rightarrow *], [* \Rightarrow *], [* \Leftrightarrow *], [* \Leftrightarrow *];**Preassociative**[$\{\text{ph} \in * \mid *\}$];**Postassociative**

[* : *], [* spy *], [*!*];

Preassociative

[* { * } *];

Preassociative[$\lambda * . *$], [$\Lambda * . *$], [$\Lambda *$], [if * then * else *], [let * = * in *], [let * \equiv * in *];**Preassociative**

[*#*];

Preassociative[*^I], [*^D], [*^V], [*⁺], [*⁻], [*^{*}];**Preassociative**[*@*], [* \triangleright *], [* $\triangleright\triangleright$ *], [* \gg *], [* \trianglelefteq *];**Postassociative**[* \vdash *], [* \Vdash *], [* i.e. *];**Preassociative**[$\forall * : *$], [$\Pi * : *$];**Postassociative**[* \oplus *];**Postassociative**

[*; *];

Preassociative

[* proves *];

Preassociative[* proof of * : *], [Line * : * \gg *; *], [Last line * \gg * \square],
[Line * : Premise \gg *; *], [Line * : Side-condition \gg *; *], [Arbitrary \gg *; *],
[Local \gg * = *; *], [Begin *; * : End; *], [Last block line * \gg * ;],
[Arbitrary \gg *; *];**Postassociative**

[* | *];

Postassociative

[* , *], [*[*]*];

Preassociative

[*&*];

Preassociative

[**], [* linebreak[4] *], [**];]

A Pyk definitioner

```
[<< testMacro(*) →pyk "<<testMacro( \" )\""]  
[Tester1 →pyk "tester1"]  
[Tester2 →pyk "tester2"]  
[Tester3 →pyk "tester3"]  
[Tester4 →pyk "tester4"]  
[Tester5 →pyk "tester5"]  
[Tester6 →pyk "tester6"]  
[* << test* →pyk "\" <<test \""]  
[prove →pyk "prove"]
```

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

[$\text{Tester1} \xrightarrow{\text{tex}} \text{“Tester1”}$]

[$\text{Tester2} \xrightarrow{\text{tex}} \text{“Tester2”}$]

[$\text{Tester3} \xrightarrow{\text{tex}} \text{“Tester3”}$]

[$\text{Tester4} \xrightarrow{\text{tex}} \text{“Tester4”}$]

[$\text{Tester5} \xrightarrow{\text{tex}} \text{“Tester5”}$]

[$\text{Tester6} \xrightarrow{\text{tex}} \text{“Tester6”}$]