Theorema 2.0: A First Tour

NB reached List of cells reached Cell Group
Data reached List of cells reached ${\bf Null}{\bf Cell}$ reached

We consider "proving", "computing", and "solving" as the three basic mathematical activities.

CellGroupData reached List of cells reached

1 Proving

We want to prove

$$(\mathop{\forall}_x (P[x] \vee Q[x])) \wedge (\mathop{\forall}_y (P[y] \Rightarrow Q[y])) \Leftrightarrow (\mathop{\forall}_x Q[x]).$$

To prove a formula like the above, we need to enter it in the context of a Theorema environment.

1.1 Proposition (First Test, 2014)

Testing MakeBoxes Style –; Iff + arg is: Testing HoldComplete –;

Cell reached CellGroupData reached List of cells reached Cell reached CellGroupData reached List of cells reached

2 Computing

CellGroupData reached List of cells reached Cell reached

2.0.1 Global Declaration

 $\begin{array}{c} \forall \\ a,b \\ a=b \end{array}$

2.1 [?]

Testing MakeBoxes Style –; Forall + arg is: Testing HoldComplete –;

■Cell reached CellGroupData reached List of cells reached Cell reached Cell reached CellGroupData reached List of cells reached Cell reached CellGroupData reached List of cells reached CellGroupData reached List of cells reached Cell reached CellGroupData reached List of cells reached

2.1.1 Global Declaration

 $_{K}^{\forall}$

2.1.2 Global Declaration

 $\mathrm{Mon}[\mathbf{K}]{:=} \underline{\boldsymbol{\Delta}}_{M}$

2.1.3 Global Declaration

 $\underset{m1,m2}{\forall}$

2.2 [?]

Testing MakeBoxes Style –; Forall + arg is: Testing HoldComplete –;

2.3 [?]

Testing MakeBoxes Style –; Forall + arg is: Testing HoldComplete –;

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3 Set Theory

CellGroupData reached List of cells reached Cell reached

3.0.1 Global Declaration

 $\displaystyle \bigvee_{x,y}$

3.1 [?]

Testing MakeBoxes Style $-\xi$ For all + arg is: Testing HoldComplete $-\xi$

■Cell reached

3.2 Proposition (transitivity of \subseteq)

Testing MakeBoxes Style $- \dot{\iota}$ For all + arg is: Testing HoldComplete $- \dot{\iota}$

Cell reached CellGroupData reached List of cells reached Cell reached