

Availability of Meth8/VL4 demo for 2-variables (p,q) with unlimited sequents

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This is free on request from info@ersatz-systems.com.

Please state name and organization to receive:

Unrestricted m8_executable.exe;

Instructions.txt with known anomalies; and

Editable sample meth8_input_file.txt.

The input file contains the shortest confirmation of McCune's proof of Huntington's equation.

From: en.wikipedia.org/wiki/Robbins_algebra

LET p, q: a, b.

$(\sim(\sim p + q) + \sim(\sim p + \sim q)) = p$; TTTT TTTT TTTT TTTT

The input file contains the shortest refutation of paraconsistent logic.

From: en.wikipedia.org/wiki/Paraconsistent_logic#An_ideal_three-valued_paraconsistent_logic

(4) To establish that a formula Γ is equivalent to Δ in the sense that either can be substituted for the other wherever they appear as a subformula, one must show

$((\Gamma \rightarrow \Delta) \wedge (\Delta \rightarrow \Gamma)) \wedge ((\neg \Gamma \rightarrow \neg \Delta) \wedge (\neg \Delta \rightarrow \neg \Gamma))$.

LET p, q: Γ, Δ .

$((p > q) \& (q > p)) \& ((\sim p > \sim q) \& (\sim q > \sim p))$; TFFT TFFT TFFT TFFT

The input file also contains the refutation for provability logic of the Gödel-Löb axiom GL as, "The necessity of *choice*, as always implying *a choice*, implies always *a choice*."

$\Box(\Box p \rightarrow p) \rightarrow \Box p$.

LET p: *choice*.

$\#(\#p > p) > \#p$; CTCT CTCT CTCT CTCT

Note that $\Box(\Box p \rightarrow \Diamond p) \rightarrow \Box \Diamond p$ as $\#(\#p > \%p) > \%p$ has the same truth table result.