

338.001, VL Logic, Martina Seidl / Wolfgang Schreiner / Wolfgang Windsteiger, 2022W

Dashboard / My courses / 2022W338001 / Module FOB: First-Order Logic - Proving / FOB1Q

Quiz navigation



Show one page at a time

Finish review

Started on	Monday, 5 December 2022, 7:15 PM
State	Finished
Completed on	Monday, 5 December 2022, 7:30 PM
Time taken	14 mins 58 secs
Grade	2.8 out of 5.0 (56.3%)

Question 1

Correct

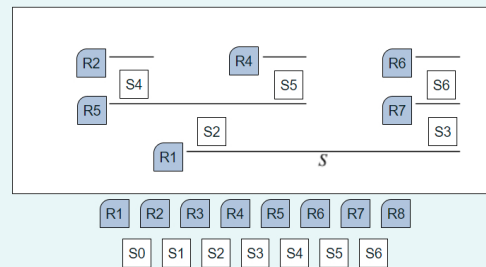
Mark 1.5 out of 1.5

Flag question

Let S, S_0, S_1, \dots, S_6 be sequents. Given the following abstract inference rules:

$$\begin{array}{llll} R1: \frac{S_2 \quad S_3}{S} & R2: \frac{}{S_4} & R3: \frac{S_1 \quad S_2}{S} & R4: \frac{}{S_5} \\ R5: \frac{S_4 \quad S_5}{S_2} & R6: \frac{}{S_6} & R7: \frac{S_6}{S_3} & R8: \frac{S_0}{S_1} \end{array}$$

Develop a formal proof tree of S , i.e. a proof tree with root S . On each transition from one node of the tree to its successor(s), i.e. next to the ":", mark the name of the inference rule that justifies this step. Drag the sequents and the rule names to the respective positions in the tree in order to retrieve a complete proof tree.



Die Antwort ist richtig.

Question 2

Partially correct

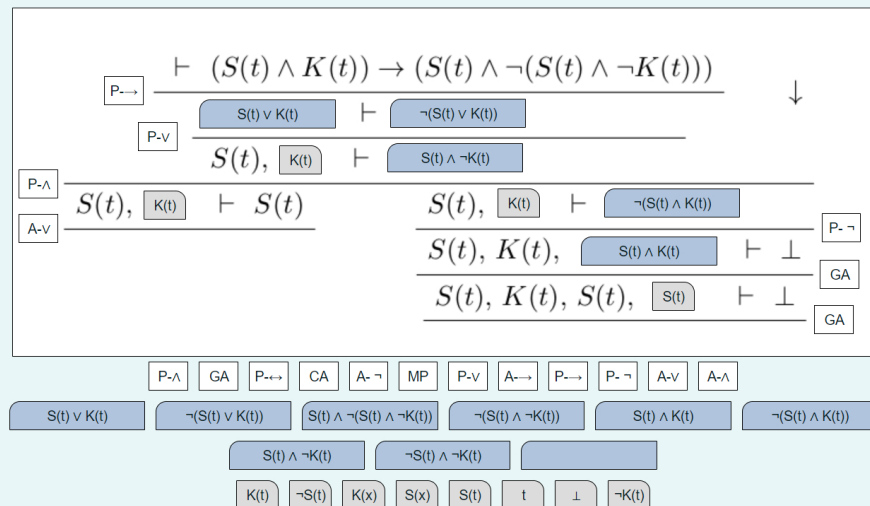
Mark 1.3 out of 3.5

Flag question

Complete the following proof tree, including the names of the rules that are applied at each step. The root of the tree is displayed at the top, the tree goes from top to bottom, i.e. the task is to prove that

$$(S(t) \wedge K(t)) \rightarrow (S(t) \wedge \neg(S(t) \wedge \neg K(t))).$$

The rule name "GA" is an abbreviation for "GoalAssum" and "CA" abbreviates "ContrAssum".



Die Antwort ist teilweise richtig.

You have correctly selected 6.

Finish review

