期中作业

hw-6 (2023/10/31)　　姓名:　　学号:

p.44: (8)　Let $\mathscr{A}$ be a *wf.* $((\neg p_1 \to p_2) \to (p_1 \to \neg p_2))$. Show that L^+, obtained by including this $\mathscr{A}$ as a new axiom, has a larger set of theorems than L. Is L^+ a consistent extension of L?　(10 points)

(注意: 此题有两问)

Your answer:

p.44: (10)　Let L^{++} be the extension of L obtained by including as a fourth axiom *scheme*:

$$((\neg\mathscr{A} \to \mathscr{B}) \to (\mathscr{A} \to \neg\mathscr{B})).$$

Show that L^{++} is inconsistent. (Hint: see Chapter 1 exercise 7 (p.10))　(10 points)

Your answer: