

Introduction to Logic

Problem 3.4 - Fitch System

Starting from the premise ($p \Rightarrow q$), use the Fitch System to prove the conclusion ($\neg q \Rightarrow \neg p$).

Start from the given premises. Apply rules of inference by checking the lines you wish to use as premises and click the button for the desired rule of inference. Reiteration allows you to repeat an earlier item. To delete one or more lines from a proof, check the desired lines and click Delete. Whenever entering expressions, use Ascii characters only. (Use \sim for \neg ; use $\&$ for \wedge ; use $|$ for \vee ; use \Rightarrow for \Rightarrow ; and use \Leftrightarrow for \Leftrightarrow .)

Proof Editor		
1.	$p \Rightarrow q$	Premise
2.	$\neg q$	Assumption
3.	p	Assumption
4.	q	Implication Elimination: 1, 3
5.	$p \Rightarrow q$	Implication Introduction: 4
6.	p	Assumption
7.	$\neg q$	Reiteration: 2
8.	$p \Rightarrow \neg q$	Implication Introduction: 7
9.	$\neg p$	Negation Introduction: 5, 8
10.	$\neg q \Rightarrow \neg p$	Implication Introduction: 9
Goal	$\neg q \Rightarrow \neg p$	Complete

Reset

Show XML