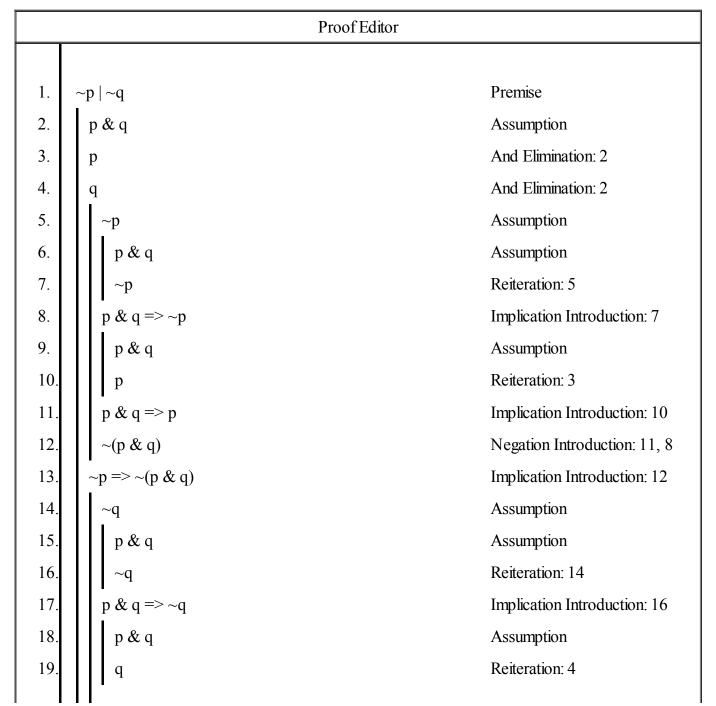
Introduction to Logic

Problem 3.6 - Fitch System

Given $(\neg p \lor \neg q)$, use the Fitch System to prove $\neg (p \land q)$.

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 | for \vee ; use | for \vee ; and use | for \vee ; use



			Problem 3	3.6 - Fitch System	
20. 21.	p ~	& q => q (p & q) => ~(p & q) & q)			Implication Introduction: 19 Negation Introduction: 20, 17
22.	~q	=> ~(p & q)			Implication Introduction: 21
23.	~(p	& q)			Or Elimination: 1, 13, 22
24.		$q => \sim (p \& q)$			Implication Introduction: 23
25.	p &	c q			Assumption
26.	p & c	q => p & q			Implication Introduction: 25
27.	~(p &	(p d)			Negation Introduction: 26, 24
Goal	~(p &	z a)			Complete
	d.	~ 4)			T
-	G. S.				
	<u> </u>	Premise	N	legation Introduction	Implication Introduction
	u ·			legation Introduction	
	<u> </u>	Premise		•	Implication Introduction
	Ч -	Premise Assumption		legation Elimination	Implication Introduction Implication Elimination
	Ч -	Premise Assumption Reiteration		legation Elimination And Introduction	Implication Introduction Implication Elimination Biconditional Introduction
	ч -	Premise Assumption Reiteration		legation Elimination And Introduction And Elimination	Implication Introduction Implication Elimination Biconditional Introduction
	ч -	Premise Assumption Reiteration		legation Elimination And Introduction And Elimination Or Introduction Or Elimination	Implication Introduction Implication Elimination Biconditional Introduction Biconditional Elimination
	ч -	Premise Assumption Reiteration		legation Elimination And Introduction And Elimination Or Introduction Or Elimination	Implication Introduction Implication Elimination Biconditional Introduction