

CRITICAL THINKING

Workshop #6: Assessing Arguments with Truth Tables

Part I: Each of the following problems presents an argument. For each, use the truth table method from class (or the textbook) to determine whether it is a valid or invalid argument. Be sure to briefly explain how the truth table supports your answer concerning the validity of the argument.

1. 1. $p \rightarrow (q \& r).$

2. $\sim p.$

$\therefore \sim r.$

p	q	r	$q \& r$	$p \rightarrow (q \& r)$	$\sim p$	$\sim r$
T	T	T				
T	T	F				
T	F	T				
T	F	F				
F	T	T				
F	T	F				
F	F	T				
F	F	F				

2. 1. $p \vee q.$

2. $\sim p.$

$\therefore q.$

3. 1. $p \rightarrow q.$

2. $q \rightarrow r.$

$\therefore p \rightarrow r.$

Part II: Each of the following problems presents an argument in English. For each, (1) translate it into the language of symbolic logic, using the indicated capital letters to label each simple positive statement involved, (2) put it into argumentative form, and (3) use the truth table method from class (or the textbook) to determine whether the argument is valid or invalid. Be sure to briefly explain how the truth table supports your answer concerning the validity of the argument.

- You're done!*