

Verifying Arguments

NAME:

1. Identify the form of the argument below and state whether it is valid.

If Bob is president, then he will get a big head.

Bob got a big head.

Therefore, Bob must be president.

2. Complete the truth table below for the above argument to provide more evidence for your conclusion. We will use the letters p and q to mean the following.

p : Bob is president.

q : Bob has a big head.

p	q	$p \rightarrow q$	q	p
T	T			
T	F			
F	T			
F	F			

Explain, in words, how the truth table shows us the validity or invalidity of the argument.

3. For the argument below, complete the truth table to test whether it is a valid argument. Please fill in all of the labeled columns; I left you a blank column in case you want to add to the table but you do not need to.

p

$\sim p \rightarrow \sim q$

$q \rightarrow r$

$\therefore r$

p	q	r	$\sim p$	$\sim q$	$\sim p \rightarrow \sim q$	$q \rightarrow r$		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						

Do not forget to answer the question. Is the argument valid?