

Valid or Invalid? (Part 2)

Answer the following questions. In order to receive credit, you must fill out the truth tables correctly, and then you must circle the correct answer: valid or invalid. There is no partial credit for these questions!

1. Consider the following argument: "Q. Therefore, $P \vee Q$." Is the argument valid or invalid?

				<u>Premise</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	Q	$\therefore P \vee Q$
T	T				
F	F				
T	F				
F	T				

2. Consider the following argument: "Q. Therefore, $P \wedge Q$." Is the argument valid or invalid?

				<u>Premise</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	Q	$\therefore P \wedge Q$
T	T				
F	F				
T	F				
F	T				

3. Consider the following argument: " $P \vee Q$. Therefore, Q ." Is the argument valid or invalid?

				<u>Premise</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	$P \vee Q$	$\therefore Q$
T	T				
F	F				
T	F				
F	T				

4. Consider the following argument: " $P \wedge Q$. Therefore, Q ." Is the argument valid or invalid?

				<u>Premise</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	$P \wedge Q$	$\therefore Q$
T	T				
F	F				
T	F				
F	T				

5. Consider the following argument: “ $P \vee Q$, and $\sim Q$, so P .” Is the argument valid or invalid?

				<u>Premise 1</u>	<u>Premise 2</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	$P \vee Q$	$\sim Q$	$\therefore P$
T	T					
F	F					
T	F					
F	T					

6. Consider the following argument: “ $P \vee Q$, and P , so Q .” Is the argument valid or invalid?

				<u>Premise 1</u>	<u>Premise 2</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	$P \vee Q$	P	$\therefore Q$
T	T					
F	F					
T	F					
F	T					

7. Consider the following argument: " $P \vee Q$, and $\sim P$, so $\sim Q$." Is the argument valid or invalid?

				<u>Premise 1</u>	<u>Premise 2</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	$P \vee Q$	$\sim P$	$\therefore \sim Q$
T	T					
F	F					
T	F					
F	T					

8. Consider the following argument: " $P \vee Q$, and P, so $\sim Q$." Is the argument valid or invalid?

				<u>Premise 1</u>	<u>Premise 2</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	$P \vee Q$	P	$\therefore \sim Q$
T	T					
F	F					
T	F					
F	T					

9. Consider the following argument: “ $\sim P \vee \sim Q$, and P, so $\sim Q$.” Is the argument valid or invalid?

				<u>Premise 1</u>	<u>Premise 2</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	$\sim P \vee \sim Q$	P	$\therefore \sim Q$
T	T					
F	F					
T	F					
F	T					

10. Consider the following argument: “ $\sim P \vee \sim Q$, and $\sim P$, so Q.” Is the argument valid or invalid?

				<u>Premise 1</u>	<u>Premise 2</u>	<u>Conclusion</u>
P	Q	$\sim P$	$\sim Q$	$\sim P \vee \sim Q$	$\sim P$	$\therefore \sim Q$
T	T					
F	F					
T	F					
F	T					