

Complete the Truth Table - Guided Lesson Explanation:**Explanation#1**

1. If the original is true, the \sim statement is false, and if the original is false, the \sim statement is true.
2. In truth table original of $\sim Q$ is true, than $\sim Q$ is false.
3. Statement " \wedge " symbolizes logical conjunction; a compound statement formed with this connective is true only if both of the component statements between which it occurs are true.
4. In truth table the original component statements between which it occurs are true, than the statement is true. So, the answer is

P	Q	$\sim Q$	$P \wedge (\sim Q)$
F	F	T	F
T	T	F	F

Explanation#2

1. If the original is true, the \sim statement is false, and if the original is false, the \sim statement is true.
2. In truth table original of $\sim M$ is true, than $\sim M$ is false.
3. Statement " \wedge " symbolizes logical conjunction; a compound statement formed with this connective is true only if both of the component statements between which it occurs are true.
4. In truth table the original component statements between which it occurs are true, than the statement is true. So, the answer is

M	N	$\sim M$	$\wedge N$
F	T	T	T
F	T	T	T



Name _____

Date _____

Explanation#3

Step 1) We should know what we have to be find out.

“Complete the truth table.”

Step 2) Before completing the truth table first we have to look for some statements. These are: -

1. If the original is true, the \sim statement is false, and if the original is false, the \sim statement is true.

2. In truth table original of $\sim J$ is true, than $\sim J$ is false.

3. Statement “ \wedge ” symbolizes logical conjunction; a compound statement formed with this connective is true only if both of the component statements between which it occurs are true.

4. In truth table the original component statements between which it occurs are true, than the statement is true.

So, the answer is

I	J	$\sim J$	$I \wedge (\sim J)$
T	F	T	T
F	T	F	F

