

Conditionals [asks for Logic Table] - Guided Lesson Explanation

If the original is true, the \sim statement is false, and if the original is false, the \sim statement is true. The statements are conditional. This means the truth value is false only when the "if" statement is true and the "then" statement is false.

Explanation#1

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

The \rightarrow symbol is used to symbolize a relationship called material implication; a compound statement formed with this connective is true unless the component on the left (the antecedent) is true and the component on the right (the consequent) is false.

M	N	$\sim M$	$\sim M \rightarrow N$
F	F	T	F
T	T	F	T

Explanation#2

In truth table original of G is true, than $\sim P$ is false.

The \rightarrow symbol is used to symbolize a relationship called material implication; a compound statement formed with this connective is true unless the component on the left (the antecedent) is true and the component on the right (the consequent) is false.

G	H	$\sim H$	$G \rightarrow (\sim H)$
F	F	T	T
T	T	F	F



Name _____

Date _____

Explanation#3

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

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

The \rightarrow symbol is used to symbolize a relationship called material implication; a compound statement formed with this connective is true unless the component on the left (the antecedent) is true and the component on the right (the consequent) is false.

D	E	$\sim D$	$\sim E$	$\sim D \rightarrow \sim E$
F	F	T	T	T
T	T	F	F	T

