

Logical Definitions

Modus Ponens

$$A \rightarrow B$$

$$B$$

$$A$$

Definitions are words or phrases that have a precise meaning. Definitions are used to explain the meaning of words and phrases. Definitions can be used to provide clarity and understanding of complex ideas and concepts.

Modus Tollens

$$A \rightarrow B$$

$$\neg B$$

$$\neg A$$

First click Modus Tollens - to see the mathematical definition

However, here is my interpretation of Modus Tollens. Basically if you know anything about logic - you know that the contrapositive is the logical equivalent to implication. This is the closest relation I can think of when thinking with respect to Modus Tollens. Here is the proof:

Proof:

$$\rightarrow A \rightarrow B$$

\rightarrow

A	$\neg A$	B	$\neg B$	$A \rightarrow B$	$\neg B \rightarrow \neg A$
T	F	T	F	T	T
T	F	F	T	F	F
F	T	T	F	T	T
F	T	F	T	T	T

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