

Episode AP06

Introduction to logic

European section, season 1

If it's snowing then it's cold.

If it's cold then it's snowing.

If it's not cold **then** it's not snowing.

A property : a true implication

If M lays on the perpendicular bisector of AB ,
then the length AM is equal to the length MB .

A property : a true implication

If M lays on the perpendicular bisector of AB ,
then the length AM is equal to the length MB .

$$M \in med(AB) \Rightarrow AM = MB$$

An equivalence

The length AM is equal to the length MB ,
if and only if M lays on the perpendicular
bisector of AB .

The length AM is equal to the length MB ,
if and only if M lays on the perpendicular
bisector of AB .

$$M \in med(AB) \Leftrightarrow AM = MB$$