

1.2 Negation

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- Statement can be either

True or False
T F

We can Represent a statement
with a Variable ... so that
we do NOT have to write it.

Let p represent

"It is Cold" $\rightarrow p$

p is either T or F

How can we write p so that
it is the opposite? $p \rightarrow \sim p$

"It is NOT Cold."

"not" p or the negation of p

-Negation: If a statement is represented by "P", Then "not P" is the negation of that Statement.

* Likewise "P" is the negation of "not P"

** The symbol \sim to represent "not"

ex1) Let p represent: "It is snowing"
 q represent: " $9-7=2$ "

write:

$\sim p \rightarrow$ It is NOT snowing

$\sim q \rightarrow 9-7 \neq 2$

$\sim(\sim p) \rightarrow$ It is false It is
Not Snowing.

O.T.L.

① Pg 6 : Exp.: 1-10(all)

Pg 7 : Written: 1-4(all)

#2 ~ () → It is False