

1.3 Conjunction

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* joining statements w/ and

-Conjunction: a compound statement formed by joining 2 statements with the word and.

The symbol \wedge is used to represent "and"

ex 1) Let $p \Rightarrow$ Mr. G. Teaches Math.

$q \Rightarrow$ 5 is an Even Number.

* Combine + form a Conjunction

Mr. G. Teaches Math and 5
is an Even Number.

In words

In Symbol

$p \wedge q$

This is read ...
"p and q"

ex2) Let $r \rightarrow "10+2=12"$

$S \rightarrow "Columbus is the capital of Ohio"$
write in words the following

i) $r \wedge S \rightarrow 10+2=12$ and Columbus
is the capital of Ohio.

ii) $r \wedge \sim S \rightarrow 10+2=12$ and Columbus
is NOT the capital of Ohio.

iii) $\sim r \wedge S \rightarrow 10+2 \neq 12$ and
Columbus is the capital of Ohio.

iv) $\sim r \wedge \sim S \rightarrow 10+2 \neq 12$ and Columbus
is not the capital of Ohio.

v) $\sim (r \wedge S) \rightarrow$ It is false that
 $10+2=12$ and Columbus is
the capital of Ohio.

O.T.L.

① pg 10-11: Written: 1-18 (all)
"do Not determine
the Truth Value!"