

1.3 cont.

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Truth Values of Conjunction.

P	Q	$P \wedge Q$
T	T	T
T	F	F
F	T	F
F	F	F

a Statement can
Be either T or F
Likewise so can
the Conjunction

* Conjunction is only True
if both parts are True

Construct a T.T. for $P \wedge \sim q$
reference Table 1

P	q	$\sim q$	$P \wedge \sim q$
T	T	F	F
T	F	T	T
F	T	F	F
F	F	T	F

Construct T.T. for $\sim p \wedge \sim q$
 reference Table 2

p	q	$\sim p$	$\sim q$	$\sim p \wedge \sim q$
T	T	F	F	F
T	F	F	T	F
F	T	T	F	F
F	F	T	T	T

ex1) Mr. G. Teaches Math & $2+2=5$

$$T \wedge F = \underline{\underline{F}}$$

ex2) $p \wedge q$ where $p \rightarrow 2+2=4$
 $q \rightarrow \text{Mr. G. Teaches Math}$

$$T \wedge T = \underline{\underline{T}}$$

⊕ $r \wedge \sim p$ where r & p are both True!

$$= T \wedge \sim T$$

$$= T \wedge F$$

$$= \underline{\underline{F}}$$

O.T.L.

① Pg 10-11: Written:
1-18 (all) → Find Truth Value
Only!

② Pg 11: Written: 19-22
Copy The Table & Fill in
From Book