

Oct. 04, 2006

Pg 18: Exploratory: 1-6 (a)

	Antecedent	Consequent
1	It rains today	I will stay home
2	$X + 3 = 7$	$X = 4$
3	Joe earns an A in Math	He will be on the honor roll
4	Bill makes the free throw	The team will win
5	Garnet will date Paul <i>Marty is of fortune</i>	Garnet will date Paul
6	The team has a good chance of winning	Either Ann or Pam pitches

Pg 18-19: Written: 1-23 (o)

1-15 read to class

Switch

- 17 $M \rightarrow \sim H$
- 19 $\sim J \rightarrow F$
- 21 $(C \vee H) \rightarrow S$
- 23 $\sim S \rightarrow (F \rightarrow C)$

1.5 cont.

Oct. 4, 2006

Write the following statement in symbolic form.

"If it is Raining Tomorrow,
Then I will either jog or go hiking."

Let $r \rightarrow$ It is raining tomorrow

$j \rightarrow$ I will jog

$h \rightarrow$ I will go hiking

$r \rightarrow (j \vee h)$

" r implies j or h "

"If r Then j or h "

} ways to
speak the
symbols



Truth Value for Conditional

It is False

If True Then False

P = True

Q = False

$P \rightarrow Q$

$Q \rightarrow P$

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

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

Truth Table of Conditional

P	Q	$P \rightarrow Q$	$Q \rightarrow P$
T	T	T	T
T	F	F	T
F	T	T	F
F	F	T	T

P: Mr. G. teaches Math True

Q: Mr. G works in Canfield ^{False}

$$P \rightarrow Q = T \rightarrow F = \underline{\underline{F}} \quad \text{T.V. only}$$

$$P \rightarrow \sim Q = T \rightarrow \sim F = T \rightarrow T = \underline{\underline{T}}$$

$$\sim P \rightarrow \sim Q = \sim T \rightarrow \sim F = F \rightarrow T = \underline{\underline{T}}$$

$$\sim P \rightarrow Q = \sim T \rightarrow F = F \rightarrow F = \underline{\underline{T}}$$

$$Q \rightarrow P = F \rightarrow T = \underline{\underline{T}}$$

$$\sim Q \rightarrow P = \sim F \rightarrow T = T \rightarrow T = \underline{\underline{T}}$$

$$\sim Q \rightarrow \sim P = \sim F \rightarrow \sim T = T \rightarrow F = \underline{\underline{F}}$$

$$Q \rightarrow \sim P = F \rightarrow \sim T = F \rightarrow F = \underline{\underline{T}}$$

O.T.L.

① pg 18-19: 1-23(0)

Det. Truth Value.

$P = \text{True}$

$q = \text{False}$

$r = \text{True}$