

# 1.7 Cont.

# Oct. 13, 2006

reference

Table 13

$$\sim(p \wedge q) \rightarrow (\sim p \vee \sim q)$$

$p$	$q$	$\sim p$	$\sim q$	$(p \wedge q)$	$\sim(p \wedge q)$	$(\sim p \vee \sim q)$	$\sim(p \wedge q) \rightarrow (\sim p \vee \sim q)$
T	T	F	F	T	F	F	T
T	F	F	T	F	T	T	T
F	T	T	F	F	T	T	T
F	F	T	T	F	T	T	T

write the Converse, Inverse  
and Contrapositive of ...

Original:  $\sim S \rightarrow R$

Converse:  $R \rightarrow \sim S$

Inverse:  $S \rightarrow \sim R$

Contrapositive:  $\sim R \rightarrow S$

Write the converse, Inverse,  
and contrapositive of:

"If  $3+2=6$ , Then Mars is a Planet"

Converse:

If Mars is a Planet, Then  $3+2=6$

Inverse:

If  $3+2 \neq 6$ , Then Mars is not a planet

Contrapositive:

If Mars is not a planet, Then  $3+2 \neq 6$ .

Find the Truth Value of  
the previous example's  
Original, Converse, Inverse, &  
Contrapositive

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

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

Inverse:  $\sim F \rightarrow \sim T = T \rightarrow F = \underline{\underline{F}}$

Contrapositive:  $\sim T \rightarrow \sim F = F \rightarrow T = \underline{\underline{T}}$

O.T.L.

Already  
done  
in theory

① pg. 26 : Exploratory :  
1-11(0)

② pg. 26-27 : Written :  
1, 3, 13, 15, 17, 21,  
25-31(0)

③ Ch. 1 Test **Tuesday**

**Notebooks Due Friday**