

121-130 → A

110-120 → B

94-109 → C

84-93 → D

83 ↓ → F

130*.84	120.9
130*.72	109.2
130*.64	93.6
	83.2

18. ~~(a)~~: It is false that Circles are Not Poly

. And means what math term: Conjunction

. It is True when both are True

. Symbol \wedge

. Example: $p \wedge q$

. Translation of Example: p and q

Or means what math term: Disjunction

It is False when both are False

Symbol \vee

Example: $p \vee q$

Translation of Example: $p \text{ or } q$

11. "If, Then" means what math term: Conditional
12. It is False if True then False
13. If statement is called: antecedent
14. Then statement is called: consequent
15. Symbol \rightarrow
16. Example: $p \rightarrow q$
17. Translation of Example: if p then q or p implies q

Write the converse, inverse, and contrapositive of the following original statement.

Original:	"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 $3 + 2 \neq 6$

Original:	$\sim S \rightarrow r$
Converse:	$r \rightarrow \sim S$
Inverse:	$S \rightarrow \sim r$
Contrapositive:	$\sim r \rightarrow S$

Implication

Original:	$F \rightarrow T = \textcircled{T}$
Converse:	$T \rightarrow F = \textcircled{F}$
Inverse:	$\sim F \rightarrow \sim T = T \rightarrow F = \textcircled{F}$
Contrapositive:	$\sim T \rightarrow \sim F = F \rightarrow T = \textcircled{T}$

$$\text{f 26: } \sim(q \vee r) = \sim(\neg V F) = \sim(\neg) = \underline{\underline{F}}$$

58. Complete the Truth Table

a	b	$\sim a$	$\sim b$	$(a \wedge b)$	$\sim(a \wedge b)$	$(\sim a \vee \sim(a \wedge b))$	$\sim b \rightarrow (\sim a \vee \sim(a \wedge b))$
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