

Hour: 1st

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Honors Geometry: Truth Tables

Let p = any statement
 q = any statement

$\rightarrow$ = implies

$\leftrightarrow$ = if and only if

t = both true

f = both false

NOT
(negation)

p	$\sim p$
T	F
F	T

AND
(conjunction) $\cap$
 $p \wedge q$

p	q	$p \text{ and } q$
T	T	T
T	F	F
F	T	F
F	F	F

OR (inclusive)
(disjunction) $\cup$

p	q	$p \text{ or } q$
T	T	T
T	F	T
F	T	T
F	F	F

CONDITIONAL $\rightarrow$
(implication)

p	q	$p \rightarrow q$
T	T	T
T	F	F
F	T	T
F	F	T

BICONDITIONAL
(equivalence)

p	q	$p \leftrightarrow q$
T	T	T
T	F	F
F	T	F
F	F	T