

Math 2283 - Introduction to Logic

Quiz #4 - 2015.09.02 Solutions

1. Construct fundamental truth tables for: (1) $\sim p$, (2) $p \vee q$, (3) $p \wedge q$, (4) $p \rightarrow q$, (5) $p \leftrightarrow q$.

p	$\sim p$	p	q	$p \vee q$	p	q	$p \wedge q$	p	q	$p \rightarrow q$	p	q	$p \leftrightarrow q$
T	F	T	T	T	T	T	T	T	T	T	T	T	T
T	F	F	T	T	F	T	F	F	T	T	F	T	F
F	T	T	F	T	T	F	F	T	F	F	T	F	F
F	T	F	F	F	F	F	F	F	F	T	F	F	T

2. For a sentence to be true, what must the last column of its corresponding truth table look like?

No false entries must appear in the last column of the truth table.