



Truth Tables

A truth table shows how the truth or falsity of a compound statement depends on the truth or falsity of the simple statements from which it's constructed. Complete the next truth tables:

1.

p	q	$\neg q$	$p \vee q$	$\neg q \rightarrow (p \vee q)$
T				
T				
F				
F				

2.

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

3.

p	q	$\neg p$	$p \rightarrow q$	$\neg p \vee q$	$(p \rightarrow q) \leftrightarrow (\neg p \vee q)$



4.

p	q	$\neg p$	$p \rightarrow q$	$\neg p \wedge q$	$(p \rightarrow q) \wedge (\neg p \wedge q)$

5.

p	q	$\neg p$	$\neg q$	$p \leftrightarrow \neg q$	$\neg p \wedge \neg q$	$(p \leftrightarrow \neg q) \leftrightarrow (\neg p \wedge \neg q)$

6.

p	q	r	$\neg r$	$p \rightarrow \neg r$	$q \wedge \neg r$	$(p \rightarrow \neg r) \leftrightarrow (q \wedge \neg r)$