

Math 2283 - Introduction to Logic

Quiz #8 - 2012.09.12

Solutions

1. Construct a truth table for the sentence: $[(p \wedge q) \rightarrow r] \leftrightarrow [(p \rightarrow q) \vee (p \rightarrow r)]$

p	q	r	$(p \wedge q)$	$(p \wedge q) \rightarrow r$	$(p \rightarrow q)$	$(p \rightarrow r)$	$(p \rightarrow q) \vee (p \rightarrow r)$	$[(p \wedge q) \rightarrow r] \leftrightarrow [(p \rightarrow q) \vee (p \rightarrow r)]$
T	T	T	T	T	T	T	T	T
T	T	F	T	F	T	F	T	F
T	F	T	F	T	F	T	T	T
T	F	F	F	T	F	F	F	F
F	T	T	F	T	T	T	T	T
F	T	F	F	T	T	T	T	T
F	F	T	F	T	T	T	T	T
F	F	F	F	T	T	T	T	T