DISCRETE MATH
QUIZ 2

Name:_____

You have 10 minutes for this exam. If you have a question, raise your hand and remain seated. In order to receive full credit your answer must be **complete**, **legible** and **correct**.

1.

(a) Define ***proposition.***

A ***proposition*** is a declarative sentence.

(b) Define ***logical equivalence*** of propositions.

Two propositions are ***logically equivalent*** if they have the same truth table.

2. Compute the truth table for $(((\neg p) \wedge (q \to r)) \leftrightarrow ((p \vee q) \to (\neg r)))$:

p	q	r	$\neg p$	$\wedge$	$q \to r$	$\leftrightarrow$	$p \vee q$	$\to$	$\neg r$
T	T	T	F	F	T	T	T	F	F
T	T	F	F	F	F	F	T	T	T
T	F	T	F	F	T	T	T	F	F
T	F	F	F	F	T	F	T	T	T
F	T	T	T	T	T	F	T	F	F
F	T	F	T	F	F	F	T	T	T
F	F	T	T	T	T	T	F	T	F
F	F	F	T	T	T	T	F	T	T