

Math 270 - Basic Discrete Mathematics
Practice Quiz on Section 2.1
Solutions

Directions: Answer the problems given below.

1. Determine whether the statement forms $p \vee (p \wedge q)$ and p are logically equivalent.

Truth Table:

p	q	$p \wedge q$	$p \vee (p \wedge q)$
T	T	T	T
T	F	F	T
F	T	F	F
F	F	F	F

the same!

Since both columns are identical, both statement forms have the same output for any combination of input: Yes, they are logically equivalent.

2. Use De Morgan's Laws to write a negation for the following statement: "Math 270 is the most enjoyable course I have ever taken and I am learning a great deal in it."

Math 270 is not the most enjoyable course I have ever taken, or I am not learning a great deal in it.

(The original statement is true.)