Section 3.2-Truth Tables

Read pp. 91-98

Help with Test 1 correction

#15. Set E contains 70 elements, set F contains 28 elements, the number of elements in neither E nor F is 14, and set E ∪ F has 86 elements.

a. n(F ∩ E) _____

Definers for Example: s = my shape is a square. b = the color of my shape is blue.

s	$\sim s$
T	
F	

Negation _____the truth values.

s	b	$s \wedge b$
T	T	
T	F	
F	T	
F	F	

Conjunction is <u>true only</u>_____

s	b	$s \vee b$
T	T	
T	F	
F	T	
F	F	

Disjunction is <u>only false when</u>_____.

1) Practice where w= today is Wednesday, and s = I can sleep in, r = I will rest tomorrow

If f is true, and s is false, r is true. Identify the truth value of each

a) $w \wedge s$ _____, b) $\sim (s \vee w)$ _____, c) $\sim (w \vee \sim s) \wedge r$ _____

2 Complete a truth table for $\sim (f \vee \sim s) \wedge r$

If a statement has *k* variables, then the truth table will have _____ lines.

3) To set up a truth table the number of lines _____ each time you add a different simple statement. So the number of lines needed for the truth table in each compound statement below is:

a. $\sim (f \vee \sim s) \wedge r$ _____

b. $\sim s \vee f \wedge s$ _____

c. $\sim (f \vee \sim s) \wedge s$ _____

Assignment for Friday, 9/16:

Complete #1, 7-10, 19, 25, 26, 33, 39, 71, 72 on pp. 99-102 (Quiz Friday over sections 3.1 & 3.2)

Keep working on your test corrections that will be due on Monday.