

Name (PRINTED): _____

Student ID #: _____

Section # (or TA's: _____
name and time)

CMSC 250

Quiz #3

Wednesday, Sept. 14, 2005

1. [6 pnts.] For each of the following identify the rule being applied or tell that it is not one of those rules listed in your textbook and on the "cheat sheet".

	I like carrots or peas.	
a.	I don't like carrots.	
	I don't like peas.	
	I will sleep well only if I eat dinner.	
b.	I did eat dinner.	
	I will sleep well.	

Prove each of the following arguments using only the rules from Chapter 1 (of your textbook - the same as the sheet handed out during the lab section). You may not use the textbook or sheet while taking the quiz - you will not be penalized for not knowing the exact name of the rules (get as close as possible). Make sure you are using only those rules. For each line, make sure you tell the statement known to be true, the rule used to get that statement, and the line numbers to which the rule was applied to get that statement.

2. [8 pnts.]

P1	$p \wedge q$
P2	$(p \wedge r) \rightarrow s$
P3	$q \rightarrow r$
	therefore s

#	Statement	Rule	Lines Used
1			
2			
3			
4			
5			
6			
7			

↓ TURN OVER ↓

3. [8 pnts.]

P1	$\sim p \vee q$
P2	$r \rightarrow s$
P3	$s \rightarrow q$
P4	$p \vee r$
	therefore q

#	Statement	Rule	Lines Used
1			
2			
3			
4			
5			
6			
7			

4. [8 pnts.]

P1	$p \vee r$
P2	$\sim p \wedge s$
	therefore $r \wedge s$

#	Statement	Rule	Lines Used
1			
2			
3			
4			
5			
6			