CS 486, Spring '01
March 8, 2001
5 questions

Quiz 5

1. If a denumerable set of formulas S is unsatisfiable, then a finite subset of S is unsatisfiable. <u>true</u> <u>false</u>

2. The block tableau node $\{Tp_1, Tp_2, Fp_3, Fp_1,\}$ is equivalent to the sequent $p_1, p_2, p_3 \vdash p_1$. <u>true</u> <u>false</u>

3. Which is a correct definition of ~A? Circle all correct definitions.
   i. $A \supset \sim A$
   ii. $A \supset \bot$
   iii. $A \supset (A \,\&\, \sim A)$

4. What is the correct result of substituting $(p \wedge q)$ for q in $\forall p.(p \supset (q \supset p))$?
   Circle all correct answers.
   i. $\forall p.(p \supset ((p \wedge q) \supset p))$
   ii. $\forall r.(r \supset ((p \wedge q) \supset r))$
   iii. $\forall q.(q \supset ((p \wedge q) \supset q))$
   iv. $\forall q.(q \supset ((q \wedge q) \supset q))$

5. In Refinement Logic the rule for $\overline{H} \vdash P \vee Q$ splits into two separate rules, one with subgoal $\overline{H} \vdash P$ and the other with subgoal $\overline{H} \vdash Q$. <u>true</u> <u>false</u>