CS486 Applied Logic Assignment 10 Due Thurs, April 26, 2001

Reading: Please read Stewart & Tall (S & T) Chapters 6 and 7 (these are reviews of logic), and p. 145-156 of Chapter 8.

Study carefully the Peano axioms (N1) to (N3) on p. 146.

Exercises:

1. Formalize in first-order logic the arguments in parts (c) and (d) of problem 6, p. 131 of S & T.

2. Solve problem 8, p. 131.

3. Solve problem 9, p. 132.

4. Formalize the false argument on page 137 that 1 is the largest number and point out the false step.

5. Convert the tableau rules for equality (see Lecture notes on Web for Thurs, April 19) to Refinement rules.