

CSci 550 : Program Semantics & Derivation
Spring Semester 2006, Assignment #1
Due Thursday, 2 February, 8:00 a.m.

Prove the following theorems from *A Programmer's Introduction to Predicate Logic*. In a proof of a theorem you may use any axiom or theorem appearing above the theorem (i.e., smaller number) in the list and any of the applicable proof techniques we discussed in class.

- Theorems 13, 21, and 22 about conjunction.
- Theorems 26, 29, and 34 about implication.
- Theorem 46, 55, and 57 about negation.

You may want to do several other theorems for your own study.