

L6. Model Theory  
Homework Assignment 1.

Exercise 1: Let  $\mathcal{A}, \mathcal{B}$  be structures (for the same language) such that  $\mathcal{A} \equiv \mathcal{B}$  and  $\mathcal{B}$  is finite. Prove that  $\mathcal{A} \cong \mathcal{B}$ .

Exercise 2: Exercise 1.3.9, page 34.

Exercise 3: Exercise 1.3.11, page 34.

Exercise 4: Exercise 2.1.9, page 72  
(Note that "equivalent" means "elementarily equivalent")

Exercise 5: Exercise 2.1.13 (ii)  
(Note that "finitely axiomatizable" is defined on page 37, in the second paragraph)

Deadline. Monday, April 20.