## Exercises.

- 7.0 Study Chapter 5.1-5.3
- 7.1 Exercise 5.1.1
- 7.2 Suppose  $\mathbf{M} = (\mathbf{D}, \mathbf{I})$  is a model for  $\mathbf{L}$ ,  $\mathbf{A}$  an assignment in  $\mathbf{M}$ ,  $\sigma$  is a substitution. Define  $\mathbf{B}$  by setting for each variable  $v^{\mathbf{B}} = (v\sigma)^{\mathbf{I},\mathbf{A}}$ . Then  $t^{\mathbf{I},\mathbf{B}} = (t\sigma)^{\mathbf{I},\mathbf{A}}$  for any term t.
- 7.3 Exercise 5.3.1
- 7.4 Exercise 5.3.2
- 7.5 Exercise 5.3.6

## **Optional Exercises.**

- 1. Exercise 5.3.4
- 2. Exercise 5.3.5