Exercise 8.1. Typeset your solution to exercise 7.1. Then rewrite and typeset the preliminaries of that paper.

Exercise 8.2. Typeset the following formulae:

\[
\neg A \land \exists R^- A \land (\leq 1 R) \land \forall (R^-)^+ (\exists R^- A \land (\leq 1 R)) \tag{2.1}
\]

\[
\pi_x (\leq n R) = \exists \leq n y. R(x, y) = \exists y_1, \ldots, y_n . \bigwedge_{i \neq j} y_i \neq y_j \supset \bigvee_i \neg R(x, y_i) \tag{2.2}
\]

Tree \equiv \mu X.(\text{EmptyTree} \sqcup (\text{Node} \sqcap \leq 1 \text{child} \sqcap \exists \text{child}. \top \sqcap \forall \text{child}. X)) \tag{2.3}

(\mu X.C)_P^I = \bigcap \{ \mathcal{E} \subseteq \Delta^X | C_{\rho[X/E]}^I \subseteq \mathcal{E} \} \tag{2.4}

s \rightarrow t \text{ iff } \exists (l, r) \in E, p \in Pos(s), \sigma \in Sub. s|_p = \sigma(l) \text{ and } t = s[\sigma(r)]_p \tag{2.5}

\mathbb{K}[\mathcal{C}]_r := (G \cup c_{\min}, M \cup c_{\max}, I_c \cap (G \cup c_{\min}) \times (M \cup c_{\max})) \tag{2.6}

0 = \int_{\{ s_n(u) > \frac{1}{k} + E^{A_n} u \}} (s_n(u) - E^{A_n} u) \, d\mu \geq \frac{1}{k} \mu \left( \left\{ s_n(u) > \frac{1}{k} + E^{A_n} u \right\} \right) \tag{2.7}

Exercise 8.3. Use \texttt{bibtex} to typeset a bibliography of all published literature referenced on exercise sheets 0–7. Make all references as complete as possible, and strive for consistency among the references.