```
\stackrel{\xi}{\xrightarrow{\beta}} \stackrel{\alpha}{\xrightarrow{\beta}} \rightarrow
          \alpha, \alpha \vee

\frac{\alpha}{\beta} \overrightarrow{\alpha} \rightarrow \beta \\
(\alpha \rightarrow \alpha \vee \neg \alpha) \rightarrow (\alpha \rightarrow \alpha \vee \neg \alpha \rightarrow (\neg \alpha \rightarrow \beta)) \rightarrow (\alpha \rightarrow (\neg \alpha \rightarrow \beta)) \\
\alpha \vee \neg \alpha \rightarrow \alpha \rightarrow \alpha \vee \neg \alpha \\
\alpha \rightarrow \alpha \vee \neg \alpha \rightarrow (\neg \alpha \rightarrow \beta)) \rightarrow (\alpha \rightarrow (\neg \alpha \rightarrow \beta)) \\
\alpha \rightarrow \alpha \vee \neg \alpha \rightarrow \neg \alpha \rightarrow \beta

\frac{1}{2}

\frac
                                           \begin{array}{l} \gamma \alpha \alpha \alpha \alpha \alpha \alpha \beta \beta \alpha \alpha \beta \beta \alpha \alpha \beta \beta \alpha \alpha \alpha \beta \beta \alpha \alpha \beta \beta \alpha \alpha \alpha \beta \beta \alpha \alpha \beta \beta \alpha \alpha \beta \beta \alpha \alpha \beta \beta \alpha \beta \beta
                                                      \sup_{u \in \mathbb{R}} (\phi) = \min_{u \in \mathbb{R}} \{u | u \ge 0\}

\begin{aligned}
& \text{with } \{a | a \\ \forall x \in \\ \phi \} \\ & inf(\phi) = \end{aligned}

                                           \max_{\forall x \in } \{u | u \le x \in X\}
```