VARIABLE
$$\frac{\Gamma(x) = T}{\Gamma \vdash x \in T}$$

ABSTRACTION
$$\frac{\Gamma, x : S \vdash t \in T}{\Gamma \vdash \mathbf{fun}\ (x : S) = t \in S \to T}$$

FUNCTION APPLICATION
$$\frac{\Gamma \vdash t \in S \to T \qquad \Gamma \vdash S \ni u}{\Gamma \vdash t\,u \in T}$$

LET BINDING
$$\frac{\Gamma \vdash t \in T \qquad \Gamma, x : T \vdash u \in S}{\Gamma \vdash \mathbf{let}\ x = t\ \mathbf{in}\ u \in S}$$

TYPE ABSTRACTION
$$\frac{\Gamma, X \vdash t \in T \qquad X \notin freetyvars(\Gamma)}{\Gamma \vdash \mathbf{fun}\ [X] = t \in \forall X.T}$$

TYPE APPLICATION
$$\frac{\Gamma \vdash t \in \forall X.T}{\Gamma \vdash t[S] \in T[X \mapsto S]}$$

TYPE ANNOTATION
$$\frac{\Gamma \vdash T \ni t}{\Gamma \vdash (t : T) \in T}$$

TYPE CHECKING
$$\frac{\Gamma \vdash t \in S \qquad \Gamma \vdash S \equiv T}{\Gamma \vdash T \ni t}$$