$$\frac{}{\Gamma \vdash IConst\ i : Int} \qquad \frac{}{\Gamma \vdash BConst\ b : Bool} \qquad \frac{}{\Gamma \vdash Var\ v : \tau}\ \Gamma[v] \equiv \tau$$

$$\frac{\Gamma \vdash t : Int, \Gamma \vdash s : Int}{\Gamma \vdash t + s : Int} \qquad \frac{\Gamma \vdash t : \tau, \Gamma \vdash s : \tau}{\Gamma \vdash t = s : Bool} \qquad \frac{\Gamma \vdash v : \tau_v,\ (\tau_v :: \Gamma) \vdash b : \tau}{\Gamma \vdash \underline{let}\ v\ b : \tau}$$

$$\frac{\Gamma \vdash t : Int, \Gamma \vdash s : Int}{\Gamma \vdash t * s : Int} \qquad \frac{\Gamma \vdash t : Int, \Gamma \vdash s : Int}{\Gamma \vdash t < s : Bool} \qquad \frac{\Gamma \vdash c : Bool, \Gamma \vdash t : \tau, \Gamma \vdash s : \tau}{\Gamma \vdash \underline{if}\ c\ \underline{then}\ t\ \underline{else}\ s : \tau}$$