

$$\frac{\rho[x \mapsto t_x.f \mapsto t_x \rightarrow int] \mapsto 1 : int}{\frac{\rho \mapsto f : (\alpha \rightarrow int) \rightarrow int \quad \rho \mapsto f : \alpha}{\rho[f \mapsto \forall \alpha. t_x \rightarrow int]} \quad \alpha \text{ not free in } \rho} \text{let f x = 1 in f f end}$$