

$$m^{\Downarrow} := \begin{cases} m \, \eta & \textbf{if } m :: (\alpha \rightarrow \mathbb{D}_\alpha) \rightarrow \beta \\ m (\lambda n. n^{\Downarrow}) & \textbf{otherwise} \end{cases} \equiv m (\star (\eta \dots (\star (\eta \, \eta))))$$

$$m^{\Downarrow\uparrow} := \lambda k. (m^{\Downarrow}) \star k \quad \equiv \star (\Downarrow m)$$

$$m^{\Downarrow\Downarrow} := \lambda k. m (\lambda n. k \, n^{\Downarrow}) \quad \equiv (\star (\eta \, \Downarrow)) // m$$

$$\mu m := m \star \lambda x. x \quad \equiv \Downarrow ((\star m) // (\star (\eta \star)))$$