1

$$\mathscr{C}_1\ \frac{\mathscr{E}_3\ \dfrac{\mathscr{E}_2\ \rho \vdash_\Delta \langle x, \sigma\rangle \longrightarrow_e \langle 3, \sigma\rangle}{\rho \vdash_\Delta \langle x*y, \sigma\rangle \longrightarrow_e \langle 3*y, \sigma\rangle}\ \begin{array}{l}\rho(x) = \ell_x \\ \sigma(\ell_x) = 3\end{array}}{\rho \vdash_\Delta \langle x := x*y, \sigma\rangle \longrightarrow_c \langle x := 3*y, \sigma\rangle}$$

2

$$\mathscr{C}_1\ \frac{\mathscr{E}_4\ \dfrac{\mathscr{E}_2\ \rho \vdash_\Delta \langle y, \sigma\rangle \longrightarrow_e \langle 2, \sigma\rangle}{\rho \vdash_\Delta \langle 3*y, \sigma\rangle \longrightarrow_e \langle 3*2, \sigma\rangle}\ \rho(y) = 2}{\rho \vdash_\Delta \langle x := 3*y, \sigma\rangle \longrightarrow_c \langle x := 3*2, \sigma\rangle}$$

3

$$\mathscr{C}_1\ \frac{\mathscr{E}_1\ \rho \vdash_\Delta \langle 3*2, \sigma\rangle \longrightarrow_e \langle 6, \sigma\rangle}{\rho \vdash_\Delta \langle x := 3*2, \sigma\rangle \longrightarrow_c \langle x := 6, \sigma\rangle}$$

4

$$\mathscr{C}_2\ \rho \vdash_\Delta \langle x := 6, \sigma\rangle \longrightarrow_c \sigma[\ell_x \leftarrow 6] \qquad \rho(x) = \ell_x$$