

$$\begin{aligned}
& (\text{FixFunMinRes}(\mathbf{d}) \circ_{\text{Pos}_{\mathcal{U}}} \text{FixFunMinRes}(\mathbf{e}))^{\star}(x) \\
&= \bigcup_{y \in \text{FixFunMinRes}(\mathbf{d})^{\star}(x)} \text{FixFunMinRes}(\mathbf{e})^{\star}(y) \\
&= \bigcup_{y \in \{y \in Y \mid \mathbf{d}(x^*, y)\}} \{z \in Z \mid \mathbf{e}(y^*, z)\} \\
&= \{z \in Z \mid (y \in Y) \wedge \mathbf{d}(x^*, y) \wedge \mathbf{e}(y^*, z)\} \\
&= \{y \in Y \mid \bigvee_{y \in Y} \mathbf{d}(x^*, y) \wedge \mathbf{e}(y^*, z)\}.
\end{aligned}$$