$$= \bigcup_{y \in FixFunMinRes(\mathbf{d})^{*}(x)} FixFunMinRes(\mathbf{e})^{*}(y)$$

 $(FixFunMinRes(\mathbf{d}) \, \, _{\mathbf{Pos}_{9}} \, FixFunMinRes(\mathbf{e}))^{\star}(x)$ 

$$= \bigcup_{y \in \{y \in Y \mid \mathbf{d}(x^*, y)\}} \{z \in Z \mid \mathbf{e}(y^*, z)\}$$

$$= \{z \in Z \mid (y \in Y) \land \mathbf{d}(x^*, y) \land \mathbf{e}(y^*, z)\}$$
$$= \{y \in Y \mid \bigvee \mathbf{d}(x^*, y) \land \mathbf{e}(y^*, z)\}.$$