t17_funct_5 (TM-Frb4MQdTF84G3JDnjuvSUse3VULxAGhEp)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_funct\_4 : \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \Rightarrow ((k4\_tarski\ X0\ X1 \in k9\_xtuple\_0\ X2) \Leftrightarrow (k4\_tarski\ X1\ X0 \in k9\_xtuple\_0\ (k2\_funct\_4\ X2))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k10\_xtuple\_0\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.k4\_tarski\ X3\ X2 \in X0)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k9\_xtuple\_0\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.k4\_tarski\ X2\ X3 \in X0)) \tag{3}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow ((k9\_xtuple\_0\ (k9\_xtuple\_0\ X0) = k10\_xtuple\_0\ (k9\_xtuple\_0\ (k2\_funct\_4\ X0))) \wedge (k10\_xtuple\_0\ (k9\_xtuple\_0\ X0) = k9\_xtuple\_0\ (k9\_xtuple\_0\ (k2\_funct\_4\ X0))))$$