t1_mfold_2 (TMaxgHD3VWkCGoZEBXWu4HkqZ2LtHBXSETj)

October 27, 2020

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 $k6\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ X1) \Rightarrow (v1\_relat\_1\ (k6\_relat\_1\ X0\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (\forall X1.\forall X2.(X2 = k8\_relat\_1\ X0\ X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow (\exists X4.(k4\_tarski\ X3\ X4 \in X0) \wedge (X4 \in X1)))) \tag{2}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ X1) \Rightarrow (\forall X2.(v1\_relat\_1\ X2) \Rightarrow ((X2 = k6\_relat\_1\ X0\ X1) \Leftrightarrow (\forall X3.\forall X4.(k4\_tarski\ X3\ X4 \in X2) \Leftrightarrow ((X4 \in X0) \wedge (k4\_tarski\ X3\ X4 \in X1))))) \tag{4}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.k9\_xtuple\_0\ (k6\_relat\_1\ X1\ X0) = k8\_relat\_1\ X0\ X1)$$