

t149_finseq_3

(TMbVvoznso2cJmb9Yn4mjxR2K4e73AaFwLw)

October 27, 2020

Let $k9_funct_6 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. 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 $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$(k2_finseq_1\ np_1 = k1_tarski\ np_1) \wedge (k2_finseq_1\ np_2 = k2_tarski\ np_1\ np_2) \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1\ X1) \wedge (v1_funct_1\ X1)) \Rightarrow ((v1_relat_1\ (k9_funct_6\ X0\ X1)) \wedge (v1_funct_1\ (k9_funct_6\ X0\ X1))) \tag{2}$$

Assume the following.

$$\forall X0. (v1_relat_1\ (k9_finseq_1\ X0)) \wedge (v1_funct_1\ (k9_finseq_1\ X0)) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_1\ X1) \wedge (v1_funct_1\ X1)) \Rightarrow (\forall X2. \\ & ((v1_relat_1\ X2) \wedge (v1_funct_1\ X2)) \Rightarrow ((X2 = k9_funct_6\ X0\ X1) \Leftrightarrow ((\\ & k9_xtuple_0\ X2 = k9_xtuple_0\ X1) \wedge (\forall X3. (X3 \in k9_xtuple_0 \\ & X1) \Rightarrow (k1_funct_1\ X2\ X3 = k1_funct_2\ X0\ (k1_funct_1\ X1\ X3)))))) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1\ X1) \wedge (v1_funct_1\ X1)) \Rightarrow ((X1 = k9_finseq_1\ X0) \Leftrightarrow ((k9_xtuple_0\ X1 = k2_finseq_1\ np_1) \wedge (k1_funct_1\ X1\ np_1 = X0))) \tag{5}$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1_tarski\ X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \tag{6}$$

Theorem 1

$$\forall X0.\forall X1.k9_funct_6 X0 (k9_finseq_1 X1) = k9_finseq_1 (k1_funct_2 X0 X1)$$