

t126_abcmiz_1 (TMM-
FuMN67scSwTiAaCUPkg3nt99XGHjajbK)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_lang1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $r1_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k13_finseq_1 : \iota \Rightarrow \iota$ be given. Let $u1_lang1 : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4_tarski\ X0\ X1 \in k2_zfmisc_1\ X2\ X3) \Leftrightarrow ((X0 \in X2) \wedge (X1 \in X3)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1_subset_1\ X1\ (k1_zfmisc_1\ X2)) \wedge (v1_xboole_0\ X2)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ X2))) \Rightarrow (m1_subset_1\ X0\ X2) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1\ X0\ X1) \Rightarrow ((v1_xboole_0\ X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$\forall X0.k3_finseq_2\ X0 = k13_finseq_1\ X0 \quad (5)$$

Assume the following.

$$\forall X0.(l1_lang1\ X0) \Rightarrow (m1_subset_1\ (u1_lang1\ X0)\ (k1_zfmisc_1\ (k2_zfmisc_1\ (u1_struct_0\ X0)\ (k3_finseq_2\ (u1_struct_0\ X0)))) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. k4_tarSKI X0 X1 = k2_tarSKI (k2_tarSKI X0 X1) (k1_tarSKI X0) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_lang1 X0)) \Rightarrow (\forall X1. (m1_subset_1 \\ X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. ((v1_relat_1 X2) \wedge ((v1_funct_1 \\ X2) \wedge (v1_finseq_1 X2)))) \Rightarrow ((r1_lang1 X0 X1 X2) \Leftrightarrow (k4_tarSKI X1 X2 \in \\ u1_lang1 X0)))) \quad (8) \end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k13_finseq_1 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (m2_finseq_1 X2 X0)) \quad (9)$$

Theorem 1

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_lang1 X0)) \Rightarrow (\forall X1. (m1_subset_1 \\ X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. ((v1_relat_1 X2) \wedge ((v1_funct_1 \\ X2) \wedge (v1_finseq_1 X2)))) \Rightarrow ((r1_lang1 X0 X1 X2) \Rightarrow (m2_finseq_1 X2 (\\ u1_struct_0 X0)))) \end{aligned}$$