

t68_zf_lang1 (TMThmQKT- BZNoBL3F2avCw3CUDHRXCuQSPqG)

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Let $v1_zf_lang : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zf_lang : \iota$ be given. Let $k2_zf_model : \iota \Rightarrow \iota$ be given. Let $k16_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 \\ X2 k5_numbers k1_zf_lang) \Rightarrow (k2_zf_model (k14_zf_lang X1 X2 X0) = \\ k7_subset_1 k1_zf_lang (k2_zf_model X0) (k2_tarski X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (k2_zf_model (k8_zf_lang \\ X1 X0) = k7_subset_1 k1_zf_lang (k2_zf_model X0) (k1_tarski X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. k4_xboole_0 (k4_xboole_0 X0 \\ X1) X2 = k4_xboole_0 X0 (k2_xboole_0 X1 X2) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. k1_enumset1 X0 X1 X2 = k2_xboole_0 \\ (k1_tarski X0) (k2_tarski X1 X2) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Leftrightarrow(m1_finseq_1 X1 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(k7_subset_1 X0 X1 X2 = k4_xboole_0 X1 X2) \quad (7)$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(m1_subset_1 (k7_subset_1 X0 X1 X2) (k1_zfmisc_1 X0)) \quad (9)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0)\wedge(m1_finseq_1 X0 k5_numbers))\Rightarrow(m1_subset_1 (k2_zf_model X0) (k1_zfmisc_1 k1_zf_lang)) \quad (10)$$

Assume the following.

$$m1_subset_1 k1_zf_lang (k1_zfmisc_1 k5_numbers) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1 X0 k1_zf_lang)\wedge((m1_subset_1 X1 k1_zf_lang)\wedge((v1_zf_lang X2)\wedge(m1_finseq_1 X2 k5_numbers))))\Rightarrow((v1_zf_lang (k14_zf_lang X0 X1 X2))\wedge(m2_finseq_1 (k14_zf_lang X0 X1 X2) k5_numbers)) \quad (12)$$

Assume the following.

$$\forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang)\Rightarrow(\forall X1.(m2_subset_1 X1 k5_numbers k1_zf_lang)\Rightarrow(\forall X2.(m2_subset_1 X2 k5_numbers k1_zf_lang)\Rightarrow(\forall X3.((v1_zf_lang X3)\wedge(m2_finseq_1 X3 k5_numbers))\Rightarrow(k16_zf_lang X0 X1 X2 X3 = k8_zf_lang X0 (k14_zf_lang X1 X2 X3)))))) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (14)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (15)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang\ X0) \wedge (m2_finseq_1\ X0\ k5_numbers)) \Rightarrow (\forall X1. \\ & (m2_subset_1\ X1\ k5_numbers\ k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2\ k5_numbers\ k1_zf_lang) \Rightarrow (\forall X3.(m2_subset_1\ X3\ k5_numbers \\ & k1_zf_lang) \Rightarrow (k2_zf_model\ (k16_zf_lang\ X1\ X2\ X3\ X0) = k7_subset_1 \\ & k1_zf_lang\ (k2_zf_model\ X0)\ (k1_enumset1\ X1\ X2\ X3)))))) \end{aligned}$$