

t148_zf_lang1 (TM-
LoD7CnFPtuKXGe5dsAfgt7MVLmQH7sF1)

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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 $k3_zf_lang1 : \iota \Rightarrow \iota$ be given. Let $k15_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k13_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\forall X0. \forall X1. \forall X2. k2_xboole_0 (k2_xboole_0 X0 X1) X2 = k2_xboole_0 X0 (k2_xboole_0 X1 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k2_tarski X0 X1 = k2_xboole_0 (k1_tarski X0) (k1_tarski X1) \quad (2)$$

Assume the following.

$$\forall X0. ((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (k3_zf_lang1 (k13_zf_lang X1 X0) = k2_xboole_0 (k3_zf_lang1 X0) (k1_tarski X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (5)$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \quad (6)$$

Assume the following.

$$m1_subset_1\ k1_zf_lang\ (k1_zfmisc_1\ k5_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_subset_1\ X0\ k1_zf_lang)\wedge((v1_zf_lang \\ X1)\wedge(m1_finseq_1\ X1\ k5_numbers)))\Rightarrow((v1_zf_lang\ (k13_zf_lang \\ X0\ X1))\wedge(m2_finseq_1\ (k13_zf_lang\ X0\ X1)\ k5_numbers)) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_subset_1\ X0\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X1. \\ (m2_subset_1\ X1\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X2.((v1_zf_lang \\ X2)\wedge(m2_finseq_1\ X2\ k5_numbers))\Rightarrow(k15_zf_lang\ X0\ X1\ X2 = k13_zf_lang \\ X0\ (k13_zf_lang\ X1\ X2)))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0\ X0\ X1 = k2_xboole_0\ X1\ X0 \quad (10)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0))\Rightarrow(v1_xboole_0\ X1)) \quad (11)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_zf_lang\ X0)\wedge(m2_finseq_1\ X0\ k5_numbers))\Rightarrow(\forall X1. \\ (m2_subset_1\ X1\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X2.(m2_subset_1 \\ X2\ k5_numbers\ k1_zf_lang)\Rightarrow(k3_zf_lang1\ (k15_zf_lang\ X1\ X2\ X0) = \\ k2_xboole_0\ (k3_zf_lang1\ X0)\ (k2_tarski\ X1\ X2)))) \end{aligned}$$