

t171_zf_lang1 (TM- SZd3Gn2nPpfJS8VE2u3D36q1KARuxTR9V)

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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 $v4_zf_lang : \iota \Rightarrow o$ be given. Let $k20_zf_lang : \iota \Rightarrow \iota$ be given. Let $k6_zf_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_zf_lang : \iota \Rightarrow \iota$ be given. Let $k5_zf_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zf_misc_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 k5_numbers k1_zf_lang) \Rightarrow ((v4_zf_lang X0) \Leftrightarrow (v4_zf_lang (k6_zf_lang1 \\ & X0 X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\forall X2.(\\ & m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow (\forall X3.(m2_subset_1 \\ & X3 k5_numbers k1_zf_lang) \Rightarrow ((k6_zf_lang X0 = k5_zf_lang1 (k6_zf_lang \\ & X1) X2 X3) \Leftrightarrow (X0 = k5_zf_lang1 X1 X2 X3)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zf_misc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((v1_zf_lang X0) \wedge (m1_finseq_1 \\ & X0 k5_numbers)) \wedge ((m1_subset_1 X1 k1_zf_lang) \wedge (m1_subset_1 X2 \\ & k1_zf_lang))) \Rightarrow (k6_zf_lang1 X0 X1 X2 = k5_zf_lang1 X0 X1 X2) \end{aligned} \tag{5}$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(((v1_zf_lang \ X0)\wedge(m1_finseq_1 \\ X0 \ k5_numbers))\wedge((m1_subset_1 \ X1 \ k1_zf_lang)\wedge(m1_subset_1 \ X2 \\ k1_zf_lang)))\Rightarrow((v1_zf_lang \ (k6_zf_lang1 \ X0 \ X1 \ X2))\wedge(m2_finseq_1 \\ (k6_zf_lang1 \ X0 \ X1 \ X2) \ k5_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.((v1_zf_lang \ X0)\wedge(m1_finseq_1 \ X0 \ k5_numbers))\Rightarrow((v1_zf_lang \ (k20_zf_lang \ X0))\wedge(m2_finseq_1 \ (k20_zf_lang \ X0) \ k5_numbers)) \quad (8)$$

Assume the following.

$$m1_subset_1 \ k1_zf_lang \ (k1_zfmisc_1 \ k5_numbers) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang \ X0)\wedge(m2_finseq_1 \ X0 \ k5_numbers))\Rightarrow((v4_zf_lang \ X0)\Rightarrow(\forall X1.((v1_zf_lang \ X1)\wedge(m2_finseq_1 \ X1 \\ k5_numbers))\Rightarrow((X1 = k20_zf_lang \ X0)\Leftrightarrow(k6_zf_lang \ X1 = X0)))) \end{aligned} \quad (10)$$

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

$$\begin{aligned} \forall X0.((v1_zf_lang \ X0)\wedge(m2_finseq_1 \ X0 \ k5_numbers))\Rightarrow(\forall X1. \\ (m2_subset_1 \ X1 \ k5_numbers \ k1_zf_lang)\Rightarrow(\forall X2.(m2_subset_1 \\ X2 \ k5_numbers \ k1_zf_lang)\Rightarrow((v4_zf_lang \ X0)\Rightarrow(k20_zf_lang \ (k6_zf_lang1 \\ X0 \ X1 \ X2) = k6_zf_lang1 \ (k20_zf_lang \ X0) \ X1 \ X2)))) \end{aligned}$$