

t73_zf_lang1 (TM-
Ton5AmV8kLF4aDVE9CTZDAf22VBqTsBra)

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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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_zf_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zf_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_zf_lang : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(\neg v1_xboole_0 \\ & X2) \Rightarrow (\forall X3.((v1_funct_1 X3) \wedge ((v1_funct_2 X3 k1_zf_lang \\ & X2) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X2)))))) \Rightarrow \\ & ((r1_zf_model X2 X3 (k8_zf_lang X1 X0)) \Leftrightarrow (\forall X4.(m1_subset_1 \\ & X4 X2) \Rightarrow (r1_zf_model X2 (k2_zf_lang1 X2 X3 X1 X4) X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\ & (v1_funct_2 X1 k1_zf_lang X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k1_zf_lang X0)))) \Rightarrow (\forall X2.((v1_zf_lang X2) \wedge (m2_finseq_1 \\ & X2 k5_numbers)) \Rightarrow ((r1_zf_model X0 X1 X2) \Leftrightarrow (\neg r1_zf_model X0 X1 (k6_zf_lang \\ & X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_zf_lang)\wedge((v1_zf_lang X1)\wedge(m1_finseq_1 X1 k5_numbers)))\Rightarrow(v1_zf_lang (k8_zf_lang X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0)\wedge(m1_finseq_1 X0 k5_numbers))\Rightarrow(v1_zf_lang (k6_zf_lang X0)) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_zf_lang)\wedge(m1_finseq_1 X1 k5_numbers))\Rightarrow(m2_finseq_1 (k8_zf_lang X0 X1) k5_numbers) \quad (8)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k5_numbers)\Rightarrow(m2_finseq_1 (k6_zf_lang X0) k5_numbers) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & (((v1_funct_1 X1)\wedge((v1_funct_2 X1 k1_zf_lang X0)\wedge(m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X0))))))\wedge((m1_subset_1 \\ & X2 k1_zf_lang)\wedge(m1_subset_1 X3 X0)))\Rightarrow((v1_funct_1 (k2_zf_lang1 \\ & X0 X1 X2 X3))\wedge((v1_funct_2 (k2_zf_lang1 X0 X1 X2 X3) k1_zf_lang X0)\wedge \\ & (m1_subset_1 (k2_zf_lang1 X0 X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 \\ & k1_zf_lang X0)))))) \end{aligned} \quad (10)$$

Assume the following.

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

Assume the following.

$$\forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang)\Rightarrow(\forall X1. ((v1_zf_lang X1)\wedge(m2_finseq_1 X1 k5_numbers))\Rightarrow(k13_zf_lang X0 X1 = k6_zf_lang (k8_zf_lang X0 (k6_zf_lang X1)))) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2. (\neg v1_xboole_0 \\ & X2) \Rightarrow (\forall X3. ((v1_funct_1 X3) \wedge ((v1_funct_2 X3 k1_zf_lang \\ & X2) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X2)))))) \Rightarrow \\ & ((r1_zf_model X2 X3 (k13_zf_lang X1 X0)) \Leftrightarrow (\exists X4. (m1_subset_1 \\ & X4 X2) \wedge (r1_zf_model X2 (k2_zf_lang1 X2 X3 X1 X4) X0)))))) \end{aligned}$$