

t159_zf_lang1 (TMGuHVJf-
gaxRNEne5NX6wmV28L71G4rvr6Q)

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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 $k8_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_zf_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_zf_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ & X1 k5_numbers) \Rightarrow (\forall X2.(m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow \\ & (\forall X3.(m2_subset_1 X3 k5_numbers k1_zf_lang) \Rightarrow ((k8_zf_lang \\ & X2 X0 = k8_zf_lang X3 X1) \Rightarrow ((X2 = X3) \wedge (X0 = X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_zf_lang X0) \wedge (m1_finseq_1 \\ & X0 k5_numbers)) \wedge ((m1_subset_1 X1 k1_zf_lang) \wedge (m1_subset_1 X2 \\ & k1_zf_lang))) \Rightarrow (k6_zf_lang1 X0 X1 X2 = k5_zf_lang1 X0 X1 X2) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang\ X0)\wedge(m2_finseq_1\ X0\ k5_numbers))\Rightarrow(\forall X1. \\ & ((v1_zf_lang\ X1)\wedge(m2_finseq_1\ X1\ k5_numbers))\Rightarrow(\forall X2.(\\ & m2_subset_1\ X2\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X3.(m2_subset_1 \\ & X3\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X4.(m2_subset_1\ X4\ k5_numbers \\ & k1_zf_lang)\Rightarrow(\forall X5.(m2_subset_1\ X5\ k5_numbers\ k1_zf_lang)\Rightarrow \\ & ((X0 = k5_zf_lang1\ X1\ X2\ X3)\Rightarrow(((\neg(X4 = X5)\wedge(X5\neq X2))\wedge(\neg(X4 = X3)\wedge \\ & (X5 = X2)))\vee(k8_zf_lang\ X4\ X0 = k5_zf_lang1\ (k8_zf_lang\ X5\ X1)\ X2 \\ & X3))))))))) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k1_zf_lang)\wedge((v1_zf_lang\ X1)\wedge(m1_finseq_1\ X1\ k5_numbers)))\Rightarrow(v1_zf_lang\ (k8_zf_lang\ X0\ X1)) \tag{6}$$

Assume the following.

$$\neg v1_xboole_0\ k1_zf_lang \tag{7}$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_zf_lang\ X0)\wedge(m1_finseq_1 \\ & X0\ k5_numbers))\wedge((m1_subset_1\ X1\ k1_zf_lang)\wedge(m1_subset_1\ X2 \\ & k1_zf_lang)))\Rightarrow((v1_zf_lang\ (k6_zf_lang1\ X0\ X1\ X2))\wedge(m2_finseq_1 \\ & (k6_zf_lang1\ X0\ X1\ X2)\ k5_numbers)) \end{aligned} \tag{9}$$

Assume the following.

$$m1_subset_1\ k1_zf_lang\ (k1_zfmisc_1\ k5_numbers) \tag{10}$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0))\Rightarrow(v1_xboole_0\ X1)) \tag{11}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang\ X0)\wedge(m2_finseq_1\ X0\ k5_numbers))\Rightarrow(\forall X1. \\ & ((v1_zf_lang\ X1)\wedge(m2_finseq_1\ X1\ k5_numbers))\Rightarrow(\forall X2.(\\ & m2_subset_1\ X2\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X3.(m2_subset_1 \\ & X3\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X4.(m2_subset_1\ X4\ k5_numbers \\ & k1_zf_lang)\Rightarrow((X2\neq X3)\Rightarrow((k8_zf_lang\ X2\ X0 = k6_zf_lang1\ (k8_zf_lang \\ & X2\ X1)\ X3\ X4)\Leftrightarrow(X0 = k6_zf_lang1\ X1\ X3\ X4))))))))) \end{aligned}$$