

t62_zf_lang1 (TMPFScXWVEFpqhpiXr- GuWzfqeFeBA1DPHdC)

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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 $k8_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k23_zf_lang : \iota \Rightarrow \iota$ be given. Let $k24_zf_lang : \iota \Rightarrow \iota$ be given. Let $v2_zf_lang : \iota \Rightarrow o$ be given. Let $k4_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_zf_lang : \iota \Rightarrow o$ be given. Let $k5_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_zf_lang : \iota \Rightarrow o$ be given. Let $k6_zf_lang : \iota \Rightarrow \iota$ be given. Let $v5_zf_lang : \iota \Rightarrow o$ be given. Let $k7_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_zf_lang : \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_zf_lang : \iota \Rightarrow \iota$ be given. Let $k19_zf_lang : \iota \Rightarrow \iota$ be given. Let $k20_zf_lang : \iota \Rightarrow \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k21_zf_lang : \iota \Rightarrow \iota$ be given. Let $k22_zf_lang : \iota \Rightarrow \iota$ 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.

$$\begin{aligned} & \forall X0. ((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow ((k23_zf_lang (k8_zf_lang \\ & X1 X0) = X1) \wedge (k24_zf_lang (k8_zf_lang X1 X0) = X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_zf_lang\ X0) \wedge (m2_finseq_1\ X0\ k5_numbers)) \Rightarrow ((\\
& \neg(v2_zf_lang\ X0) \wedge (\forall X1.(m2_subset_1\ X1\ k5_numbers\ k1_zf_lang) \Rightarrow \\
& (\forall X2.(m2_subset_1\ X2\ k5_numbers\ k1_zf_lang) \Rightarrow (X0 \neq k4_zf_lang \\
& \quad X1\ X2)))) \wedge (((\exists X1.(m2_subset_1\ X1\ k5_numbers\ k1_zf_lang) \wedge \\
& (\exists X2.(m2_subset_1\ X2\ k5_numbers\ k1_zf_lang) \wedge (X0 = k4_zf_lang \\
& \quad X1\ X2))) \Rightarrow (v2_zf_lang\ X0)) \wedge ((\neg(v3_zf_lang\ X0) \wedge (\forall X1.(m2_subset_1 \\
& \quad X1\ k5_numbers\ k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1\ X2\ k5_numbers \\
& \quad k1_zf_lang) \Rightarrow (X0 \neq k5_zf_lang\ X1\ X2)))) \wedge (((\exists X1.(m2_subset_1 \\
& \quad X1\ k5_numbers\ k1_zf_lang) \wedge (\exists X2.(m2_subset_1\ X2\ k5_numbers \\
& \quad k1_zf_lang) \wedge (X0 = k5_zf_lang\ X1\ X2))) \Rightarrow (v3_zf_lang\ X0)) \wedge ((\neg(v4_zf_lang \\
& \quad X0) \wedge (\forall X1.((v1_zf_lang\ X1) \wedge (m2_finseq_1\ X1\ k5_numbers)) \Rightarrow \\
& \quad (X0 \neq k6_zf_lang\ X1))) \wedge (((\exists X1.((v1_zf_lang\ X1) \wedge (m2_finseq_1 \\
& \quad X1\ k5_numbers)) \wedge (X0 = k6_zf_lang\ X1)) \Rightarrow (v4_zf_lang\ X0)) \wedge ((\neg(v5_zf_lang \\
& \quad X0) \wedge (\forall X1.((v1_zf_lang\ X1) \wedge (m2_finseq_1\ X1\ k5_numbers)) \Rightarrow \\
& \quad (\forall X2.((v1_zf_lang\ X2) \wedge (m2_finseq_1\ X2\ k5_numbers)) \Rightarrow (\\
& \quad X0 \neq k7_zf_lang\ X1\ X2)))) \wedge (((\exists X1.((v1_zf_lang\ X1) \wedge (m2_finseq_1 \\
& \quad X1\ k5_numbers)) \wedge (\exists X2.((v1_zf_lang\ X2) \wedge (m2_finseq_1\ X2 \\
& \quad k5_numbers)) \wedge (X0 = k7_zf_lang\ X1\ X2))) \Rightarrow (v5_zf_lang\ X0)) \wedge ((\neg(\\
& \quad v6_zf_lang\ X0) \wedge (\forall X1.(m2_subset_1\ X1\ k5_numbers\ k1_zf_lang) \Rightarrow \\
& \quad (\forall X2.((v1_zf_lang\ X2) \wedge (m2_finseq_1\ X2\ k5_numbers)) \Rightarrow (\\
& \quad X0 \neq k8_zf_lang\ X1\ X2)))) \wedge (((\exists X1.(m2_subset_1\ X1\ k5_numbers \\
& \quad k1_zf_lang) \wedge (\exists X2.((v1_zf_lang\ X2) \wedge (m2_finseq_1\ X2\ k5_numbers)) \wedge \\
& \quad (X0 = k8_zf_lang\ X1\ X2))) \Rightarrow (v6_zf_lang\ X0)))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_zf_lang\ X0) \wedge (m2_finseq_1\ X0\ k5_numbers)) \Rightarrow ((\\
& (v2_zf_lang\ X0) \Rightarrow (k2_zf_model\ X0 = k2_tarski\ (k18_zf_lang\ X0)\ (\\
& \quad k19_zf_lang\ X0))) \wedge (((v3_zf_lang\ X0) \Rightarrow (k2_zf_model\ X0 = k2_tarski \\
& \quad (k18_zf_lang\ X0)\ (k19_zf_lang\ X0))) \wedge (((v4_zf_lang\ X0) \Rightarrow (k2_zf_model \\
& \quad X0 = k2_zf_model\ (k20_zf_lang\ X0))) \wedge (((v5_zf_lang\ X0) \Rightarrow (k2_zf_model \\
& \quad X0 = k4_subset_1\ k1_zf_lang\ (k2_zf_model\ (k21_zf_lang\ X0))\ (k2_zf_model \\
& \quad (k22_zf_lang\ X0)))) \wedge (((v6_zf_lang\ X0) \Rightarrow (k2_zf_model\ X0 = k7_subset_1 \\
& \quad k1_zf_lang\ (k2_zf_model\ (k24_zf_lang\ X0))\ (k1_tarski\ (k23_zf_lang \\
& \quad X0)))))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1_xboole_0\ X0) \wedge ((\neg v1_xboole_0\ X1) \wedge \\
& (m1_subset_1\ X1\ (k1_zf_misc_1\ X0)))) \Rightarrow (\forall X2.(m2_subset_1\ X2\ X0\ X1) \Leftrightarrow (m1_subset_1\ X2\ X1))
\end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1\ X1\ X0) \Leftrightarrow (m1_finseq_1\ X1\ X0) \tag{5}$$

Assume the following.

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

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.

$$m1_subset_1 k1_zf_lang (k1_zf_misc_1 k5_numbers) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zf_misc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (10)$$

Theorem 1

$$\forall X0.((v1_zf_lang X0)\wedge(m2_finseq_1 X0 k5_numbers))\Rightarrow(\forall X1.(m2_subset_1 X1 k5_numbers k1_zf_lang)\Rightarrow(k2_zf_model (k8_zf_lang X1 X0) = k7_subset_1 k1_zf_lang (k2_zf_model X0) (k1_tarski X1)))$$