

t87_zf_lang1
(TMWPE8TbSSTFXp2JtZ6fnEVMNEzpxA8exsN)

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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 $v1_xboole_0 : \iota \Rightarrow o$ 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 $k1_zf_lang : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zf_misc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zf_misc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_zf_lang : \iota \Rightarrow o$ be given. Let $r1_zf_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k21_zf_lang : \iota \Rightarrow \iota$ be given. Let $k22_zf_lang : \iota \Rightarrow \iota$ be given. Let $k7_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow ((k21_zf_lang \\ & (k7_zf_lang X0 X1) = X0) \wedge (k22_zf_lang (k7_zf_lang X0 X1) = X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((v5_zf_lang X0) \Rightarrow (X0 = k7_zf_lang (k21_zf_lang X0) (k22_zf_lang X0))) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow ((v5_zf_lang \\ & X0) \Rightarrow ((\neg (X1 = k21_zf_lang X0) \wedge (\forall X2.((v1_zf_lang X2) \wedge (m2_finseq_1 \\ & X2 k5_numbers)) \Rightarrow (k7_zf_lang X1 X2 \neq X0))) \wedge ((\exists X2.((v1_zf_lang \\ & X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge (k7_zf_lang X1 X2 = X0)) \Rightarrow (X1 = \\ & k21_zf_lang X0)) \wedge ((\neg (X1 = k22_zf_lang X0) \wedge (\forall X2.((v1_zf_lang \\ & X2) \wedge (m2_finseq_1 X2 k5_numbers)) \Rightarrow (k7_zf_lang X2 X1 \neq X0))) \wedge ((\\ & \exists X2.((v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge (k7_zf_lang \\ & X2 X1 = X0)) \Rightarrow (X1 = k22_zf_lang X0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& (v1_funct_2 X1 k1_zf_lang X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k1_zf_lang X0)))) \Rightarrow (\forall X2.((v1_zf_lang X2) \wedge (m2_finseq_1 \\
& X2 k5_numbers)) \Rightarrow (\forall X3.((v1_zf_lang X3) \wedge (m2_finseq_1 X3 \\
& k5_numbers)) \Rightarrow ((r1_zf_model X0 X1 (k7_zf_lang X2 X3)) \Leftrightarrow ((r1_zf_model \\
& X0 X1 X2) \wedge (r1_zf_model X0 X1 X3))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\\
& v5_zf_lang X0) \Leftrightarrow (\exists X1.((v1_zf_lang X1) \wedge (m2_finseq_1 X1 \\
& k5_numbers)) \wedge (\exists X2.((v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge \\
& (X0 = k7_zf_lang X1 X2))))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\
& (\neg v1_xboole_0 X1) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\
& X2 k1_zf_lang X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang \\
& X1)))) \Rightarrow ((v5_zf_lang X0) \Rightarrow ((r1_zf_model X1 X2 X0) \Leftrightarrow ((r1_zf_model \\
& X1 X2 (k21_zf_lang X0)) \wedge (r1_zf_model X1 X2 (k22_zf_lang X0))))))
\end{aligned}$$