

t84_zf_lang1 (TML-
GoV8sZd2kkmKsJJt6D7Pd6XqDPoYpB37)

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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 $v2_zf_lang : \iota \Rightarrow o$ be given. Let $r1_zf_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_zf_lang : \iota \Rightarrow \iota$ be given. Let $k19_zf_lang : \iota \Rightarrow \iota$ be given. Let $k5_zf_model : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & (\neg v1_xboole_0 X1) \Rightarrow ((v2_zf_lang X0) \Rightarrow (\forall X2.((v1_funct_1 \\ & X2) \wedge ((v1_funct_2 X2 k1_zf_lang X1) \wedge (m1_subset_1 X2 (k1_zf_misc_1 \\ & (k2_zf_misc_1 k1_zf_lang X1)))))) \Rightarrow ((k3_funct_2 k1_zf_lang X1 X2 \\ & (k18_zf_lang X0) = k3_funct_2 k1_zf_lang X1 X2 (k19_zf_lang X0)) \Leftrightarrow \\ & (X2 \in k5_zf_model X0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (\\ & (v1_funct_2 X1 k1_zf_lang X0) \wedge (m1_subset_1 X1 (k1_zf_misc_1 (k2_zf_misc_1 \\ & k1_zf_lang X0)))))) \Rightarrow (\forall X2.((v1_zf_lang X2) \wedge (m2_finseq_1 \\ & X2 k5_numbers)) \Rightarrow ((r1_zf_model X0 X1 X2) \Leftrightarrow (X1 \in k5_zf_model X2 X0)))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & (\neg v1_xboole_0 X1) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 k1_zf_lang X1) \wedge (m1_subset_1 X2 (k1_zf_misc_1 (k2_zf_misc_1 k1_zf_lang \\ & X1)))))) \Rightarrow ((v2_zf_lang X0) \Rightarrow ((r1_zf_model X1 X2 X0) \Leftrightarrow (k3_funct_2 \\ & k1_zf_lang X1 X2 (k18_zf_lang X0) = k3_funct_2 k1_zf_lang X1 X2 (\\ & k19_zf_lang X0)))))) \end{aligned}$$