

t5_zfmodel2

(TMdUpJ5Fqx57n9hyVMGeRsoTFPVCjxgurET)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k1_zf_lang : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_zf_lang : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_zf_lang1 : \iota \Rightarrow \iota$ be given. Let $r1_zf_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zf_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(\neg v1_xboole_0 \\ & X2) \Rightarrow (\forall X3.((v1_funct_1 X3) \wedge ((v1_funct_2 X3 k1_zf_lang \\ & X2) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X2)))))) \Rightarrow \\ & ((r1_zf_model X2 X3 (k8_zf_lang X1 X0)) \Leftrightarrow (\forall X4.(m1_subset_1 \\ & X4 X2) \Rightarrow (r1_zf_model X2 (k2_zf_lang1 X2 X3 X1 X4) X0)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang) \Rightarrow (\forall X1. \\ & (\neg v1_xboole_0 X1) \Rightarrow (\forall X2.((v1_zf_lang X2) \wedge (m2_finseq_1 \\ & X2 k5_numbers)) \Rightarrow (\forall X3.((v1_funct_1 X3) \wedge ((v1_funct_2 X3 \\ & k1_zf_lang X1) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang \\ & X1)))))) \Rightarrow ((\neg X0 \in k4_zf_lang1 X2) \Rightarrow ((r1_zf_model X1 X3 X2) \Leftrightarrow (r1_zf_model \\ & X1 X3 (k8_zf_lang X0 X2)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 X2 X0 X1)\Leftrightarrow(m1_subset_1 X2 X1)) \quad (4)$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge(((v1_funct_1 X1)\wedge((v1_funct_2 X1 k1_zf_lang X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X0))))))\wedge((m1_subset_1 X2 k1_zf_lang)\wedge(m1_subset_1 X3 X0))))\Rightarrow((v1_funct_1 (k2_zf_lang1 X0 X1 X2 X3))\wedge((v1_funct_2 (k2_zf_lang1 X0 X1 X2 X3) k1_zf_lang X0)\wedge(m1_subset_1 (k2_zf_lang1 X0 X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X0)))))) \quad (6)$$

Assume the following.

$$m1_subset_1 k1_zf_lang (k1_zfmisc_1 k5_numbers) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (8)$$

Theorem 1

$$\forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang)\Rightarrow(\forall X1.(\neg v1_xboole_0 X1)\Rightarrow(\forall X2.(m1_subset_1 X2 X1)\Rightarrow(\forall X3.((v1_zf_lang X3)\wedge(m2_finseq_1 X3 k5_numbers))\Rightarrow(\forall X4.((v1_funct_1 X4)\wedge((v1_funct_2 X4 k1_zf_lang X1)\wedge(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X1))))))\Rightarrow((\neg X0 \in k4_zf_lang1 X3)\Rightarrow((r1_zf_model X1 X4 X3)\Leftrightarrow(r1_zf_model X1 (k2_zf_lang1 X1 X4 X0 X2) X3))))))$$