

t9_zfmodel2

(TMbapb2hPTracinDk1xSmDWTyeSJNF3XLeL)

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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 $k2_zf_model : \iota \Rightarrow \iota$ be given. Let $r1_zf_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zf_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& (v1_funct_2 X1 k1_zf_lang X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k1_zf_lang X0)))) \Rightarrow (\forall X2.((v1_zf_lang X2) \wedge (m2_finseq_1 \\
& X2 k5_numbers)) \Rightarrow (\forall X3.(m2_subset_1 X3 k5_numbers k1_zf_lang) \Rightarrow \\
& ((r1_zf_model X0 X1 (k8_zf_lang X3 X2)) \Leftrightarrow (\forall X4.((v1_funct_1 \\
& X4) \wedge ((v1_funct_2 X4 k1_zf_lang X0) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\
& (k2_zfmisc_1 k1_zf_lang X0)))) \Rightarrow ((\forall X5.(m2_subset_1 X5 \\
& k5_numbers k1_zf_lang) \Rightarrow ((k3_funct_2 k1_zf_lang X0 X4 X5 \neq k3_funct_2 \\
& k1_zf_lang X0 X1 X5) \Rightarrow (X3 = X5)) \Rightarrow (r1_zf_model X0 X4 X2))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang) \Rightarrow (\forall X1. \\
& ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\forall X2.(\\
& \neg v1_xboole_0 X2) \Rightarrow (\forall X3.((v1_funct_1 X3) \wedge ((v1_funct_2 \\
& X3 k1_zf_lang X2) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang \\
& X2)))) \Rightarrow ((r1_zf_model X2 X3 X1) \Rightarrow ((X0 \in k2_zf_model X1) \vee (r1_zf_model \\
& X2 X3 (k8_zf_lang X0 X1))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\
& X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1))
\end{aligned} \tag{5}$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0) \wedge \\
& (((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k1_zf_lang X0) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X0)))) \wedge ((m1_subset_1 \\
& X2 k1_zf_lang) \wedge (m1_subset_1 X3 X0)))) \Rightarrow ((v1_funct_1 (k2_zf_lang1 \\
& X0 X1 X2 X3)) \wedge ((v1_funct_2 (k2_zf_lang1 X0 X1 X2 X3) k1_zf_lang X0) \wedge \\
& (m1_subset_1 (k2_zf_lang1 X0 X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 \\
& k1_zf_lang X0))))))
\end{aligned} \tag{7}$$

Assume the following.

$$m1_subset_1 k1_zf_lang (k1_zfmisc_1 k5_numbers) \tag{8}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0) \Rightarrow (v1_xboole_0 X1)) \tag{9}$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang) \Rightarrow (\forall X1. \\ & (\neg v1_xboole_0 X1) \Rightarrow (\forall X2.(m1_subset_1 X2 X1) \Rightarrow (\forall X3. \\ & ((v1_zf_lang X3) \wedge (m2_finseq_1 X3 k5_numbers)) \Rightarrow (\forall X4.(\\ & (v1_funct_1 X4) \wedge ((v1_funct_2 X4 k1_zf_lang X1) \wedge (m1_subset_1 \\ & X4 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X1)))))) \Rightarrow ((\neg X0 \in k2_zf_model \\ & X3) \Rightarrow ((r1_zf_model X1 X4 X3) \Leftrightarrow (r1_zf_model X1 (k2_zf_lang1 X1 X4 \\ & X0 X2) X3)))))) \end{aligned}$$