

t13_zf_model (TMdbz- FUh8LpheScaij5xoEFWWJJGqBe7KPw)

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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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_zf_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_zf_model : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_zf_lang : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_subset_1 X1 k5_numbers \\
& k1_zf_lang) \Rightarrow (\forall X2. (m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow \\
& (\forall X3. ((v1_funct_1 X3) \wedge ((v1_funct_2 X3 k1_zf_lang X0) \wedge \\
& (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X0)))))) \Rightarrow \\
& ((k3_funct_2 k1_zf_lang X0 X3 X1 \in k3_funct_2 k1_zf_lang X0 X3 X2) \Leftrightarrow \\
& (X3 \in k5_zf_model (k5_zf_lang X1 X2) X0))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\
& X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((m1_subset_1 X0 k1_zf_lang) \wedge (m1_subset_1 \\
& X1 k1_zf_lang)) \Rightarrow (v1_zf_lang (k5_zf_lang X0 X1))
\end{aligned} \tag{3}$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((m1_subset_1 X0 k1_zf_lang) \wedge (m1_subset_1 \\
& X1 k1_zf_lang)) \Rightarrow (m2_finseq_1 (k5_zf_lang X0 X1) k5_numbers)
\end{aligned} \tag{5}$$

Assume the following.

$$m1_subset_1\ k1_zf_lang\ (k1_zfmisc_1\ k5_numbers) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0\ X0) \Rightarrow (\forall X1.((v1_funct_1\ X1) \wedge \\ (v1_funct_2\ X1\ k1_zf_lang\ X0) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ k1_zf_lang\ X0)))))) \Rightarrow (\forall X2.((v1_zf_lang\ X2) \wedge (m2_finseq_1 \\ X2\ k5_numbers)) \Rightarrow ((r1_zf_model\ X0\ X1\ X2) \Leftrightarrow (X1 \in k5_zf_model\ X2\ X0)))) \end{aligned} \quad (7)$$

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

$$\begin{aligned} \forall X0.(\neg v1_xboole_0\ X0) \Rightarrow (\forall X1.((v1_funct_1\ X1) \wedge \\ (v1_funct_2\ X1\ k1_zf_lang\ X0) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ k1_zf_lang\ X0)))))) \Rightarrow (\forall X2.(m2_subset_1\ X2\ k5_numbers\ k1_zf_lang) \Rightarrow \\ (\forall X3.(m2_subset_1\ X3\ k5_numbers\ k1_zf_lang) \Rightarrow ((r1_zf_model \\ X0\ X1\ (k5_zf_lang\ X2\ X3)) \Leftrightarrow (k3_funct_2\ k1_zf_lang\ X0\ X1\ X2 \in k3_funct_2 \\ k1_zf_lang\ X0\ X1\ X3)))))) \end{aligned}$$