

l42_fomodel4

(TMUtvBifxPBEN4MPgF8NPQDerNoQfc5fshu)

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Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v11_fomodel1 : \iota \Rightarrow o$ be given. Let $l1_fomodel1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k1_fomodel4 : \iota \Rightarrow \iota$ be given. Let $v10_fomodel4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k33_fomodel2 : \iota \Rightarrow \iota$ be given. Let $v4_fomodel2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k15_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v8_fomodel4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\ & X0))) \Rightarrow (\forall X1. ((v4_fomodel2 X1 X0) \wedge (m2_subset_1 X1 (k3_finseq_2 \\ & (k15_fomodel1 X0)) (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X0)) \\ & (k1_tarski k1_xboole_0)))) \Rightarrow (X1 \in k33_fomodel2 X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v6_struct_0 X2) \wedge ((v11_fomodel1 \\ & X2) \wedge (l1_fomodel1 X2))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k9_funct_2 (k9_setfam_1 (k1_fomodel4 X2)) (k9_setfam_1 (k1_fomodel4 \\ & X2)))) \Rightarrow ((v8_fomodel4 X0 X2 X3 X1) \Rightarrow ((v4_fomodel2 X0 X2) \wedge (m2_subset_1 \\ & X0 (k3_finseq_2 (k15_fomodel1 X2)) (k6_subset_1 (k3_finseq_2 \\ & (k15_fomodel1 X2)) (k1_tarski k1_xboole_0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski (k1_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\
& \quad X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k9_funct_2 (\\
& k9_setfam_1 (k1_fomodel4 X0)) (k9_setfam_1 (k1_fomodel4 X0)))))) \Rightarrow \\
& \quad (\forall X2.(v10_fomodel4 X2 X0 X1) \Leftrightarrow (\forall X3.(v8_fomodel4 \\
& \quad X3 X0 X1 X2) \Rightarrow (r1_tarski (k1_tarski X3) X2)))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\
& \quad X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k9_funct_2 (\\
& k9_setfam_1 (k1_fomodel4 X0)) (k9_setfam_1 (k1_fomodel4 X0)))))) \Rightarrow \\
& \quad (v10_fomodel4 (k33_fomodel2 X0) X0 X1)
\end{aligned}$$