

t27_fomodel2 (TMUvqHuqeJLnvVsGFr- BRgThXH9HRfNhwJTD)

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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 $v1_xboole_0 : \iota \Rightarrow o$ 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 $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k37_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k3_rfunct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_margrel1 : \iota$ be given. Let $k16_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k26_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v10_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow \\ & (k6_domain_1 X0 X1 = k1_tarski X1) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\ & X0))) \Rightarrow (\neg v1_xboole_0 (k4_xboole_0 (k3_finseq_2 (k15_fomodel1 \\ & X0)) (k1_tarski k1_xboole_0))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. m1_subset_1 (k6_subset_1 X0 X1) (k1_zfmisc_1 X0) \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v6_struct_0 X1) \wedge \\
& ((v11_fomodel1 X1) \wedge (l1_fomodel1 X1))) \Rightarrow (\forall X2.(m2_subset_1 \\
& X2 (k9_funct_2 (k37_fomodel1 X1) (k3_rfunct_3 (k3_finseq_2 X0) \\
& (k2_xboole_0 X0 k6_margrel1))) (k16_fomodel2 X1 X0)) \Rightarrow (\forall X3. \\
& (v10_fomodel2 X3 X0 X1 X2) \Leftrightarrow (\forall X4.((v4_fomodel2 X4 X1) \wedge (m2_subset_1 \\
& X4 (k3_finseq_2 (k15_fomodel1 X1)) (k6_subset_1 (k3_finseq_2 \\
& (k15_fomodel1 X1)) (k1_tarski k1_xboole_0)))) \Rightarrow ((X4 \in X3) \Rightarrow (k26_fomodel2 \\
& X1 X0 X2 X4 = np_1))))))
\end{aligned} \tag{6}$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \tag{7}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \tag{8}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\
& X0))) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.((v4_fomodel2 \\
& X2 X0) \wedge (m2_subset_1 X2 (k3_finseq_2 (k15_fomodel1 X0)) (k6_subset_1 \\
& (k3_finseq_2 (k15_fomodel1 X0)) (k1_tarski k1_xboole_0)))) \Rightarrow \\
& (\forall X3.(m2_subset_1 X3 (k9_funct_2 (k37_fomodel1 X0) (k3_rfunct_3 \\
& (k3_finseq_2 X1) (k2_xboole_0 X1 k6_margrel1))) (k16_fomodel2 \\
& X0 X1)) \Rightarrow ((k26_fomodel2 X0 X1 X3 X2 = np_1) \Leftrightarrow (v10_fomodel2 (k6_domain_1 \\
& (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X0)) (k1_tarski k1_xboole_0)) \\
& X2) X1 X0 X3))))))
\end{aligned}$$