

l3_fomodel3

(TMX1eQsnp3SDSAqT3YYvaXTrKzDF3kbrZvy)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. 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 $k8_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k15_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k1_tarSKI : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k39_fomodel1 : \iota \Rightarrow \iota$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1_xxreal_0 X1 X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg (r1_xxreal_0 X0 X1) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (X1 \neq k2_xcmplx_0 X0 X2)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0.k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2.(v7_ordinal1 \\ & X2)\Rightarrow(\forall X3.((\neg v6_struct_0\ X3)\wedge((v11_fomodel1\ X3)\wedge(l1_fomodel1 \\ & X3))))\Rightarrow(\neg(\neg X0\in k8_nat_1\ (k9_setfam_1\ (k6_subset_1\ (k3_finseq_2 \\ & (k15_fomodel1\ X3))\ (k1_tarski\ k1_xboole_0))))\ (k39_fomodel1\ X3) \\ & (k2_xcmplx_0\ X1\ X2))\wedge(X0\in k8_nat_1\ (k9_setfam_1\ (k6_subset_1 \\ & (k3_finseq_2\ (k15_fomodel1\ X3))\ (k1_tarski\ k1_xboole_0))))\ (k39_fomodel1 \\ & X3)\ X1)))) \end{aligned} \quad (6)$$

Assume the following.

$$(\neg v1_xboole_0\ k4_ordinal1)\wedge(v3_ordinal1\ k4_ordinal1) \quad (7)$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2\in X0)\Rightarrow (X2\in X1)) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1)\Rightarrow(v7_ordinal1\ X0) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0))\Rightarrow(v1_xboole_0\ X1)) \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2.((\neg v6_struct_0 \\ & X2)\wedge((v11_fomodel1\ X2)\wedge(l1_fomodel1\ X2))))\Rightarrow((X0\in k8_nat_1\ (k9_setfam_1 \\ & (k6_subset_1\ (k3_finseq_2\ (k15_fomodel1\ X2))\ (k1_tarski\ k1_xboole_0)))) \\ & (k39_fomodel1\ X2)\ X1)\Rightarrow(r1_tarski\ (ReplSep\ (toset\ (\lambda X3:\iota. \\ & m2_subset_1\ X3\ k1_numbers\ k5_numbers))\ (\lambda X3:\iota.\neg X0\in k8_nat_1 \\ & (k9_setfam_1\ (k6_subset_1\ (k3_finseq_2\ (k15_fomodel1\ X2))\ (k1_tarski \\ & k1_xboole_0))))\ (k39_fomodel1\ X2)\ X3)\ (\lambda X3:\iota.X3)\ X1))) \end{aligned}$$