

l2_fomodel3

(TMS1vN1cshxfvKyJXKH5V2497LyyHYyaH7B)

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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 $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k28_fomodel1 : \iota \Rightarrow \iota$ be given. 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 $k5_numbers : \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k25_fomodel1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (v7_ordinal1 X1) \Rightarrow (\forall X2. ((\neg v6_struct_0 X2) \wedge ((v11_fomodel1 X2) \wedge (l1_fomodel1 X2)))) \Rightarrow (r1_tarski (k1_funct_1 (k28_fomodel1 X2) X0) (k1_funct_1 (k28_fomodel1 X2) (k2_xcmplx_0 X0 X1)))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0))))))\wedge(v7_ordinal1 X2))\Rightarrow(k8_nat_1 X0 X1 X2 = k1_funct_1 X1 X2) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v6_struct_0 X0)\wedge((v11_fomodel1 X0)\wedge(l1_fomodel1 X0)))\Rightarrow(k39_fomodel1 X0 = k25_fomodel1 X0) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v6_struct_0 X0)\wedge((v11_fomodel1 X0)\wedge(l1_fomodel1 X0)))\Rightarrow(k28_fomodel1 X0 = k25_fomodel1 X0) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(v7_ordinal1 X1))\Rightarrow(v7_ordinal1 (k2_xcmplx_0 X0 X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v6_struct_0 X0)\wedge((v11_fomodel1 X0)\wedge(l1_fomodel1 X0)))\wedge(v7_ordinal1 X1))\Rightarrow(\neg v1_xboole_0 (k1_funct_1 (k28_fomodel1 X0) X1)) \quad (10)$$

Assume the following.

$$\forall X0.((\neg v6_struct_0 X0)\wedge((v11_fomodel1 X0)\wedge(l1_fomodel1 X0)))\Rightarrow(((v1_funct_1 (k39_fomodel1 X0))\wedge((v1_funct_2 (k39_fomodel1 X0) k5_numbers (k9_setfam_1 (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X0) (k1_tarski k1_xboole_0))))))\wedge(m1_subset_1 (k39_fomodel1 X0) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X0) (k1_tarski k1_xboole_0)))))))))) \quad (11)$$

Theorem 1

$$\forall X0.\forall X1.(v7_ordinal1 X1)\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow(\forall X3.((\neg v6_struct_0 X3)\wedge((v11_fomodel1 X3)\wedge(l1_fomodel1 X3)))\Rightarrow(\neg(\neg X0 \in k8_nat_1 (k9_setfam_1 (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X3) (k1_tarski k1_xboole_0))) (k39_fomodel1 X3) (k2_xcmplx_0 X1 X2))\wedge(X0 \in k8_nat_1 (k9_setfam_1 (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X3) (k1_tarski k1_xboole_0))) (k39_fomodel1 X3) X1))))))$$