

t23_polyform

(TMZU7g1oLm1KC49UeedW2BiHUiMQiKqM9ZQ)

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Let $m2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_ospace : \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Let $l4_algstr_0 : \iota \Rightarrow o$ be given. Let $l4_struct_0 : \iota \Rightarrow o$ be given. Let $l3_struct_0 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_algstr_0 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v33_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. r1_tarski (k1_tarski X0) (k2_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_tarski X1 X2)) \Rightarrow (r1_tarski X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (k9_xtuple_0 (k2_funcop_1 X0 X1) = X0) \wedge (r1_tarski (k10_xtuple_0 (k2_funcop_1 X0 X1)) (k1_tarski X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X1)\wedge(m1_funct_2 X2 X0 X1))\Rightarrow(\forall X3.(m2_funct_2 X3 X0 X1 X2)\Leftrightarrow(m1_subset_1 X3 X2)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(\neg v1_xboole_0 X1)\Rightarrow(k9_funct_2 X0 X1 = k1_funct_2 X0 X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X2 X0))\Rightarrow(k8_funcop_1 X0 X1 X2 = k2_funcop_1 X1 X2) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\neg v1_xboole_0 (k2_tarski X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow(\neg v1_xboole_0 (u1_struct_0 X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 (k2_funcop_1 X0 X1))\wedge(v1_funct_1 (k2_funcop_1 X0 X1)) \quad (10)$$

Assume the following.

$$\forall X0.(l6_algstr_0 X0)\Rightarrow((l2_algstr_0 X0)\wedge(l5_algstr_0 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(l5_algstr_0 X0)\Rightarrow((l4_algstr_0 X0)\wedge(l4_struct_0 X0)) \quad (12)$$

Assume the following.

$$\forall X0.(l4_algstr_0 X0)\Rightarrow((l3_struct_0 X0)\wedge(l3_algstr_0 X0)) \quad (13)$$

Assume the following.

$$\forall X0.(l2_struct_0 X0)\Rightarrow(l1_struct_0 X0) \quad (14)$$

Assume the following.

$$\forall X0.(l2_algstr_0 X0)\Rightarrow((l2_struct_0 X0)\wedge(l1_algstr_0 X0)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(\neg v1_xboole_0 X1)\Rightarrow(m1_funct_2 (k9_funct_2 X0 X1) X0 X1) \quad (16)$$

Assume the following.

$$\forall X0.(l3_struct_0 X0)\Rightarrow(m1_subset_1 (k5_struct_0 X0) (u1_struct_0 X0)) \quad (17)$$

Assume the following.

$$\begin{aligned} &(\neg v2_struct_0 k2_ospace)\wedge((\neg v6_struct_0 k2_ospace)\wedge((v13_algstr_0 \\ &k2_ospace)\wedge((v33_algstr_0 k2_ospace)\wedge((v3_group_1 k2_ospace)\wedge \\ &((v5_group_1 k2_ospace)\wedge((v4_vectsp_1 k2_ospace)\wedge((v5_vectsp_1 \\ &k2_ospace)\wedge((v2_rlvect_1 k2_ospace)\wedge((v3_rlvect_1 k2_ospace)\wedge \\ &((v4_rlvect_1 k2_ospace)\wedge(l6_algstr_0 k2_ospace)))))))))) \quad (18) \end{aligned}$$

Assume the following.

$$\begin{aligned} &\forall X0.\forall X1.\forall X2.(X2 = k1_funct_2 X0 X1)\Leftrightarrow(\forall X3. \\ &(X3 \in X2)\Leftrightarrow(\exists X4.((v1_relat_1 X4)\wedge(v1_funct_1 X4))\wedge((X3 = \\ &X4)\wedge((k9_xtuple_0 X4 = X0)\wedge(r1_tarski (k10_xtuple_0 X4) X1)))))) \quad (19) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski X0 X1 = k2_tarski X1 X0 \quad (20)$$

Theorem 1

$$\begin{aligned} &\forall X0.\forall X1.m2_funct_2 (k8_funcop_1 (u1_struct_0 k2_ospace) \\ &(k2_zfmisc_1 X0 X1) (k5_struct_0 k2_ospace)) (k2_zfmisc_1 X0 X1) \\ &(k2_tarski (k4_struct_0 k2_ospace) (k5_struct_0 k2_ospace)) \\ &(k9_funct_2 (k2_zfmisc_1 X0 X1) (k2_tarski (k4_struct_0 k2_ospace) \\ &(k5_struct_0 k2_ospace))) \end{aligned}$$