

t6_scmring2 (TM- FYzpqeB2WUUNiH3iZpimVzaQyRmXRvpjh)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ 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. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $v1_ami_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_scmring2 : \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_7 : \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_scmringi : \iota \Rightarrow \iota$ be given. Let $k8_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_ami_3 : \iota$ be given. Let $k2_ami_2 : \iota$ be given. Let $k2_scm_inst : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_compos_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$k8_struct_0 \ k1_ami_3 = k2_ami_2 \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 \ X0 \ X1) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 \ X1) \wedge ((v13_algstr_0 \ X1) \wedge \\ & ((v2_rlvect_1 \ X1) \wedge ((v3_rlvect_1 \ X1) \wedge ((v4_rlvect_1 \ X1) \wedge ((v3_group_1 \\ & \ X1) \wedge ((v4_vectsp_1 \ X1) \wedge ((v5_vectsp_1 \ X1) \wedge (l6_algstr_0 \ X1))))))) \Rightarrow \\ & (((v1_ami_2 \ X0) \wedge (m1_subset_1 \ X0 \ (u1_struct_0 \ (k1_scmring2 \ X1)))) \Leftrightarrow \\ & (X0 \in k8_struct_0 \ k1_ami_3)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 \ X0) \wedge (l1_struct_0 \ X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 \ X1 \ k2_scm_inst) \Rightarrow (\forall X2. (m1_subset_1 \ X2 \ k5_numbers) \Rightarrow \\ & (k3_xtuple_0 \ np_7 \ (k12_finseq_1 \ k5_numbers \ X2) \ (k12_finseq_1 \\ & \ k2_scm_inst \ X1) \in k1_scmringi \ X0)) \end{aligned} \tag{4}$$

Assume the following.

$$k2_ami_2 = k2_scm_inst \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k12_finseq_1 X0 X1 = k5_finseq_1 X1) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow(\neg v1_xboole_0 (u1_struct_0 X0)) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((v13_algstr_0 X0)\wedge((v2_rlvect_1 \\ X0)\wedge((v3_rlvect_1 X0)\wedge((v4_rlvect_1 X0)\wedge((v3_group_1 X0)\wedge(\\ (v4_vectsp_1 X0)\wedge((v5_vectsp_1 X0)\wedge(l6_algstr_0 X0))))))))))\Rightarrow \\ ((\neg v2_struct_0 (k1_scmring2 X0))\wedge(v1_extpro_1 (k1_scmring2 \\ X0) np_2)) \end{aligned} \quad (8)$$

Assume the following.

$$\neg v1_xboole_0 k2_scm_inst \quad (9)$$

Assume the following.

$$\forall X0.(l2_struct_0 X0)\Rightarrow(l1_struct_0 X0) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(l1_memstr_0 X1 X0)\Rightarrow(l2_struct_0 X1) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(l1_extpro_1 X1 X0)\Rightarrow((l1_memstr_0 X1 X0)\wedge (l1_compos_1 X1)) \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((v13_algstr_0 X0)\wedge((v2_rlvect_1 \\ X0)\wedge((v3_rlvect_1 X0)\wedge((v4_rlvect_1 X0)\wedge((v3_group_1 X0)\wedge(\\ (v4_vectsp_1 X0)\wedge((v5_vectsp_1 X0)\wedge(l6_algstr_0 X0))))))))))\Rightarrow \\ ((v1_extpro_1 (k1_scmring2 X0) np_2)\wedge(l1_extpro_1 (k1_scmring2 \\ X0) np_2)) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3_xtuple_0 X0 X1 X2 = k4_tarski (k4_tarski X0 X1) X2 \quad (14)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge ((v13_algstr_0 X1) \wedge ((v2_rlvect_1 X1) \wedge (\\ & v3_rlvect_1 X1) \wedge ((v4_rlvect_1 X1) \wedge ((v3_group_1 X1) \wedge ((v4_vectsp_1 \\ & X1) \wedge ((v5_vectsp_1 X1) \wedge (l6_algstr_0 X1)))))))))) \Rightarrow (\forall X2. \\ & ((v1_ami_2 X2) \wedge (m1_subset_1 X2 (u1_struct_0 (k1_scmring2 X1)))) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 k5_numbers) \Rightarrow (k3_xtuple_0 np_7 (\\ & k12_finseq_1 k5_numbers X3) (k12_finseq_1 (u1_struct_0 (k1_scmring2 \\ & X1)) X2) \in k1_scmringi X0)))) \end{aligned}$$