

t51_afvect0

(TMJzv9XWhdzrAWNd5Hn8ko6dVxz3qDnViKQ)

October 27, 2020

Let $v1_analoaf : \iota \Rightarrow o$ be given. Let $l1_analoaf : \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v2_tdgroup : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ 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 $v12_vectsp_1 : \iota \Rightarrow o$ be given. Let $v1_tdgroup : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $k2_tdgroup : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_afvect0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v8_algstr_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v7_struct_0 X0) \wedge ((v1_analoaf X0) \wedge ((v2_tdgroup \\ X0) \wedge (l1_analoaf X0)))) \Rightarrow &(\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (X0 = k2_tdgroup &(k5_afvect0 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v7_struct_0 X0) \wedge ((v2_tdgroup X0) \wedge (l1_analoaf \\ X0))) \Rightarrow &(\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((\neg v2_struct_0 \\ (k5_afvect0 X0 X1)) \wedge &((\neg v7_struct_0 (k5_afvect0 X0 X1)) \wedge ((v13_algstr_0 \\ (k5_afvect0 X0 X1)) \wedge &((v2_rlvect_1 (k5_afvect0 X0 X1)) \wedge ((v3_rlvect_1 \\ (k5_afvect0 X0 X1)) \wedge &((v4_rlvect_1 (k5_afvect0 X0 X1)) \wedge ((v12_vectsp_1 \\ (k5_afvect0 X0 X1)) \wedge &((v1_tdgroup (k5_afvect0 X0 X1)) \wedge (l2_algstr_0 \\ (k5_afvect0 X0 X1)))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v13_algstr_0 \\ X0) \wedge ((v2_rlvect_1 X0) \wedge &((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge \\ ((v12_vectsp_1 X0) \wedge &((v1_tdgroup X0) \wedge (l2_algstr_0 X0)))))))) \Rightarrow \end{aligned} \quad (3)$$

$$\begin{aligned} (&(\neg v7_struct_0 (k2_tdgroup X0)) \wedge ((v1_analoaf (k2_tdgroup X0)) \wedge \\ &(v2_tdgroup (k2_tdgroup X0)))) \end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((\neg v7_struct_0 X0)\wedge((v2_tdgroup X0)\wedge \\ (l1_analoaf X0)))\wedge(m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow((v8_algstr_0 \\ (k5_afvect0 X0 X1))\wedge(v12_vectsp_1 (k5_afvect0 X0 X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\exists X1.m1_subset_1 X1 X0 \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_analoaf X0)\wedge(l1_analoaf X0))\Rightarrow(((\neg v7_struct_0 \\ X0)\wedge((v2_tdgroup X0)\wedge(l1_analoaf X0)))\Leftrightarrow(\exists X1.((\neg v2_struct_0 \\ X1)\wedge((\neg v7_struct_0 X1)\wedge(v13_algstr_0 X1)\wedge(v2_rlvect_1 X1)\wedge \\ ((v3_rlvect_1 X1)\wedge(v4_rlvect_1 X1)\wedge(v12_vectsp_1 X1)\wedge(v1_tdgroup \\ X1)\wedge(l2_algstr_0 X1))))))\wedge(X0 = k2_tdgroup X1)) \end{aligned}$$