

l4_algstr_2 (TMdbDUsvnQQXWftdZgeaAD- DBHC6HpWaj87o)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_vectsp_1 : \iota$ be given. Let $k8_group_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ 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 $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ 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 $v3_vectsp_1 : \iota \Rightarrow o$ be given. Let $v6_vectsp_1 : \iota \Rightarrow o$ 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. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 \\ & X0) \wedge ((v5_group_1 X0) \wedge ((v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge \\ & l6_algstr_0 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow ((k8_group_1 X0 X1 X2 = k8_group_1 \\ & X0 X1 X3) \Rightarrow ((X1 = k4_struct_0 X0) \vee (X2 = X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & (\neg v6_struct_0 k2_vectsp_1) \wedge ((v13_algstr_0 k2_vectsp_1) \wedge ((\\ & v33_algstr_0 k2_vectsp_1) \wedge ((v36_algstr_0 k2_vectsp_1) \wedge ((v2_rlvect_1 \\ & k2_vectsp_1) \wedge ((v3_rlvect_1 k2_vectsp_1) \wedge ((v4_rlvect_1 k2_vectsp_1) \wedge \\ & ((v3_group_1 k2_vectsp_1) \wedge ((v5_group_1 k2_vectsp_1) \wedge ((v3_vectsp_1 \\ & k2_vectsp_1) \wedge ((v5_vectsp_1 k2_vectsp_1) \wedge (v6_vectsp_1 k2_vectsp_1)))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$(v36_algstr_0 k2_vectsp_1) \wedge (v4_vectsp_1 k2_vectsp_1) \quad (3)$$

Assume the following.

$$(\neg v2_struct_0 k2_vectsp_1) \wedge (v36_algstr_0 k2_vectsp_1) \quad (4)$$

Assume the following.

$$\forall X0.(l6_algstr_0 X0) \Rightarrow ((l2_algstr_0 X0) \wedge (l5_algstr_0 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(l5_algstr_0 X0) \Rightarrow ((l4_algstr_0 X0) \wedge (l4_struct_0 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l4_algstr_0 X0) \Rightarrow ((l3_struct_0 X0) \wedge (l3_algstr_0 X0)) \quad (7)$$

Assume the following.

$$(v36_algstr_0 k2_vectsp_1) \wedge (l6_algstr_0 k2_vectsp_1) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge (v5_group_1 \\ X0) \wedge (l3_algstr_0 X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (\\ m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (k8_group_1 X0 X1 X2 = k8_group_1 \\ X0 X2 X1) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} (\forall X0.(m1_subset_1 X0 (u1_struct_0 k2_vectsp_1)) \Rightarrow (\forall X1. \\ (m1_subset_1 X1 (u1_struct_0 k2_vectsp_1)) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (u1_struct_0 k2_vectsp_1)) \Rightarrow ((k8_group_1 k2_vectsp_1 X0 X1 = \\ k8_group_1 k2_vectsp_1 X0 X2) \Rightarrow ((X0 = k4_struct_0 k2_vectsp_1) \vee \\ (X1 = X2)))))) \wedge (\forall X0.(m1_subset_1 X0 (u1_struct_0 k2_vectsp_1)) \Rightarrow \\ (\forall X1.(m1_subset_1 X1 (u1_struct_0 k2_vectsp_1)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 k2_vectsp_1)) \Rightarrow ((k8_group_1 k2_vectsp_1 \\ X1 X0 = k8_group_1 k2_vectsp_1 X2 X0) \Rightarrow ((X0 = k4_struct_0 k2_vectsp_1) \vee \\ (X1 = X2)))))) \end{aligned}$$