

l8_vectsp_1

(TMXMarYQyadPgbETYa54Xevu2jtsrYgpf1y)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l4_algstr_0 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v1_group_1 : \iota \Rightarrow o$ be given. Let $l3_struct_0 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l4_algstr_0 X0) \Rightarrow ((l3_struct_0 X0) \wedge (l3_algstr_0 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(l3_struct_0 X0) \Rightarrow (m1_subset_1 (k5_struct_0 X0) (u1_struct_0 X0)) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge (l4_algstr_0 X0)) \Rightarrow ((v4_vectsp_1 \\ X0) \Leftrightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((k6_algstr_0 \\ X0 X1 (k5_struct_0 X0) = X1) \wedge (k6_algstr_0 X0 (k5_struct_0 X0) X1 = \\ X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(l3_algstr_0 X0) \Rightarrow ((v1_group_1 X0) \Leftrightarrow (\exists X1.(m1_subset_1 \\ X1 (u1_struct_0 X0)) \wedge (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ X0)) \Rightarrow ((k6_algstr_0 X0 X2 X1 = X2) \wedge (k6_algstr_0 X0 X1 X2 = X2)))))) \end{aligned} \quad (4)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l4_algstr_0 X0)) \Rightarrow ((v4_vectsp_1 X0) \Rightarrow (v1_group_1 X0))$$