

t3_algstr_1 (TMMhUS- PaLo2ikEeqPmmtgn75niMUomszDzE)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_algstr_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(l2_algstr_0 X0) \Rightarrow ((l2_struct_0 X0) \wedge (l1_algstr_0 X0)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((l1_algstr_0 X0) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (m1_subset_1 (k1_algstr_0 X0 X1 X2) (u1_struct_0 X0)) \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l2_algstr_0 X0)) \Rightarrow (((\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (k1_algstr_0 X0 X1 (k4_struct_0 \\ & X0) = X1)) \wedge ((\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\exists X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \wedge (k1_algstr_0 X0 X1 X2 = k4_struct_0 \\ & X0))) \wedge (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (k1_algstr_0 X0 (k1_algstr_0 X0 X1 X2) X3 = k1_algstr_0 \\ & X0 X1 (k1_algstr_0 X0 X2 X3)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 \\ & (u1_struct_0 X0)) \Rightarrow (\exists X2.(m1_subset_1 X2 (u1_struct_0 X0)) \wedge \\ & (k1_algstr_0 X0 X2 X1 = k4_struct_0 X0)))) \end{aligned}$$