

t17_group_1
(TMb8sLq1kbujbe6iKgak8yuRUvxg96HCAAh)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_group_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((k2_group_1 \\ X0 X1 = k2_group_1 X0 X2) \Rightarrow (X1 = X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow ((k6_algstr_0 X0 X1 X2 = X3) \Leftrightarrow \\ (X1 = k6_algstr_0 X0 X3 (k2_group_1 X0 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow ((k6_algstr_0 X0 X1 X2 = X3) \Leftrightarrow \\ (X2 = k6_algstr_0 X0 (k2_group_1 X0 X1) X3)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge \\ ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))) \wedge (m1_subset_1 X1 (u1_struct_0 \\ X0))) \Rightarrow (k2_group_1 X0 (k2_group_1 X0 X1) = X1) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((l3_algstr_0 X0)\wedge((m1_subset_1 X1 (u1_struct_0 X0))\wedge(m1_subset_1 X2 (u1_struct_0 X0))))\Rightarrow(m1_subset_1 (k6_algstr_0 X0 X1 X2) (u1_struct_0 X0)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\wedge(m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow(m1_subset_1 (k2_group_1 X0 X1) (u1_struct_0 X0)) \quad (6)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(k2_group_1 X0 (k6_algstr_0 X0 X1 X2) = k6_algstr_0 X0 (k2_group_1 X0 X2) (k2_group_1 X0 X1))))$$