

t9_group_1 (TM- RHYGVQgf6occn8EK8rz9vjNdAYWbCQWw2)

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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 $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k13_group_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_struct_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k14_group_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(m1_group_2 X2 X0) \Rightarrow ((X1 \in k13_group_2 X0 X2 X1) \wedge \\ (X1 \in k14_group_2 X0 X2 X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge (\\ v3_group_1 X1) \wedge (l3_algstr_0 X1))) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (u1_struct_0 X1)) \Rightarrow (\forall X3.(m1_group_2 X3 X1) \Rightarrow ((X0 \in k13_group_2 \\ X1 X3 X2) \Leftrightarrow (\exists X4.(m1_subset_1 X4 (u1_struct_0 X1)) \wedge ((X0 = \\ k6_algstr_0 X1 X2 X4) \wedge (r1_struct_0 X3 X4)))))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ (u1_struct_0 X0)) \Rightarrow (\neg (k13_group_2 X0 X1 X2 = k13_group_2 X0 X1 X3) \wedge \\ (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow (\neg (X2 = k6_algstr_0 \\ X0 X3 X4) \wedge (r1_struct_0 X1 X4))))))) \end{aligned}$$