

t3_group_5 (TMaXS- MyK4JnbCAvBt1s8HBYNp2AubGMRw9C)

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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 $v15_algstr_0 : \iota \Rightarrow o$ be given. Let $v1_group_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_struct_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_group_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_group_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g3_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2_algstr_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge \\ & (v3_group_1 X1) \wedge (l3_algstr_0 X1))) \Rightarrow (\forall X2. (m1_subset_1 \\ & X2 (u1_struct_0 X1)) \Rightarrow (\forall X3. (m1_group_2 X3 X1) \Rightarrow ((r1_struct_0 \\ & (k6_group_3 X1 X3 X2) X0) \Leftrightarrow (\exists X4. (m1_subset_1 X4 (u1_struct_0 \\ & X1)) \wedge ((X0 = k2_group_3 X1 X4 X2) \wedge (r1_struct_0 X3 X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge (l3_algstr_0 \\ & X0))) \Rightarrow (\forall X1. (m1_group_2 X1 X0) \Rightarrow ((\neg v2_struct_0 X1) \wedge ((v2_group_1 \\ & X1) \wedge (l3_algstr_0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ & X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_group_2 X1 X0) \Rightarrow ((v1_group_3 \\ & X1 X0) \Leftrightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (k6_group_3 \\ & X0 X1 X2 = g3_algstr_0 (u1_struct_0 X1) (u2_algstr_0 X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l3_algstr_0 X0) \Rightarrow ((v15_algstr_0 X0) \Rightarrow (X0 = g3_algstr_0 \\ & (u1_struct_0 X0) (u2_algstr_0 X0))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ & X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ & ((v15_algstr_0 X3) \wedge ((v1_group_3 X3 X0) \wedge (m1_group_2 X3 X0))) \Rightarrow \\ & ((r1_struct_0 X3 X1) \Rightarrow (r1_struct_0 X3 (k2_group_3 X0 X1 X2)))))) \end{aligned}$$