

t14_yellow21
(TMJkv5oU5sT8d4g5HMmgUD5aGRJWM4NKsPw)

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Let $v2_setfam_1 : \iota \Rightarrow o$ be given. Let $v3_orders_2 : \iota \Rightarrow o$ be given. Let $v4_orders_2 : \iota \Rightarrow o$ be given. Let $v5_orders_2 : \iota \Rightarrow o$ be given. Let $v1_lattice3 : \iota \Rightarrow o$ be given. Let $v2_lattice3 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_yellow21 : \iota \Rightarrow \iota$ be given. Let $v1_orders_2 : \iota \Rightarrow o$ be given. Let $v3_lattice3 : \iota \Rightarrow o$ be given. Let $k2_yellow21 : \iota \Rightarrow \iota$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $k1_yellow21 : \iota \Rightarrow \iota$ be given. Let $g1_struct_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (\neg v2_setfam_1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ (k6_yellow21 X0))) \Leftrightarrow (((v3_orders_2 X1) \wedge ((v4_orders_2 X1) \wedge ((\\ v5_orders_2 X1) \wedge ((v1_lattice3 X1) \wedge ((v2_lattice3 X1) \wedge ((v3_lattice3 \\ X1) \wedge (l1_orders_2 X1)))))))) \wedge (X1 \in k2_yellow21 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow (l1_struct_0 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (X1 = k2_yellow21 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow \\ (((v1_orders_2 X2) \wedge ((v3_orders_2 X2) \wedge ((v4_orders_2 X2) \wedge ((v5_orders_2 \\ X2) \wedge (l1_orders_2 X2)))))) \wedge (u1_struct_0 (k1_yellow21 X2) \in X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. ((l1_struct_0 X0) \Rightarrow (k1_yellow21 X0 = X0)) \wedge ((\neg l1_struct_0 X0) \Rightarrow (k1_yellow21 X0 = g1_struct_0 X0)) \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0. (\neg v2_setfam_1 X0) \Rightarrow (\forall X1. ((v3_orders_2 X1) \wedge \\ ((v4_orders_2 X1) \wedge ((v5_orders_2 X1) \wedge ((v1_lattice3 X1) \wedge ((v2_lattice3 \\ X1) \wedge (l1_orders_2 X1)))))) \Rightarrow ((u1_struct_0 X1 \in X0) \Rightarrow ((m1_subset_1 \\ X1 (u1_struct_0 (k6_yellow21 X0))) \Leftrightarrow ((v1_orders_2 X1) \wedge (v3_lattice3 \\ X1)))))) \end{aligned}$$