

t15_yellow_0

(TMX5inPzRb6QGidfa3PqNB2XwV7AdWXPdNf)

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Let $v5_orders_2 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $r1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r2_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(r1_yellow_0 X0 X1) \Leftrightarrow \\
 & (\exists X2.(m1_subset_1 X2 (u1_struct_0 X0)) \wedge (r2_lattice3 \\
 & X0 X1 X2) \wedge ((\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow ((r2_lattice3 \\
 & X0 X1 X3) \Rightarrow (r1_orders_2 X0 X2 X3))) \wedge (\forall X3.(m1_subset_1 X3 \\
 & (u1_struct_0 X0)) \Rightarrow (((r2_lattice3 X0 X1 X3) \wedge (\forall X4.(m1_subset_1 \\
 & X4 (u1_struct_0 X0)) \Rightarrow ((r2_lattice3 X0 X1 X4) \Rightarrow (r1_orders_2 X0 X3 \\
 & X4)))) \Rightarrow (X3 = X2))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(l1_orders_2 X0) \Rightarrow ((v5_orders_2 X0) \Leftrightarrow (\forall X1.(\\
 & m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\
 & (u1_struct_0 X0)) \Rightarrow (((r1_orders_2 X0 X1 X2) \wedge (r1_orders_2 X0 X2 \\
 & X1)) \Rightarrow (X1 = X2))))))
 \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.((v5_orders_2 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
 & (r1_yellow_0 X0 X1) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (u1_struct_0 \\
 & X0)) \wedge ((r2_lattice3 X0 X1 X2) \wedge (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
 & X0)) \Rightarrow ((r2_lattice3 X0 X1 X3) \Rightarrow (r1_orders_2 X0 X2 X3))))))
 \end{aligned}$$