

t17_yellow12

(TMR694rHwC3opf3Z3v92eP993q318GqK9Jw)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $v5_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_yellow_0 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((\\ g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 \\ X1) (u1_orders_2 X1)) \Rightarrow (\forall X2.(r2_yellow_0 X0 X2) \Rightarrow (k2_yellow_0 \\ X0 X2 = k2_yellow_0 X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((\\ g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 \\ X1) (u1_orders_2 X1)) \Rightarrow (\forall X2.((r1_yellow_0 X0 X2) \Rightarrow (r1_yellow_0 \\ X1 X2)) \wedge ((r2_yellow_0 X0 X2) \Rightarrow (r2_yellow_0 X1 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ X0 X0))) \Rightarrow (\forall X2.\forall X3.(g1_orders_2 X0 X1 = g1_orders_2 \\ X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow (m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 \\ (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(m1_yellow_0 X1 X0) \Rightarrow \\ (l1_orders_2 X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
& (m1_yellow_0 X1 X0) \Rightarrow ((v5_yellow_0 X1 X0) \Leftrightarrow (\forall X2.(m1_subset_1 \\
& X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
& X0)) \Rightarrow (((X2 \in u1_struct_0 X1) \wedge ((X3 \in u1_struct_0 X1) \wedge (r2_yellow_0 \\
& X0 (k7_domain_1 (u1_struct_0 X0) X2 X3)))) \Rightarrow (k2_yellow_0 X0 (k7_domain_1 \\
& (u1_struct_0 X0) X2 X3) \in u1_struct_0 X1))))))
\end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
& ((\neg v2_struct_0 X1) \wedge (l1_orders_2 X1)) \Rightarrow (\forall X2.(m1_yellow_0 \\
& X2 X0) \Rightarrow (\forall X3.(m1_yellow_0 X3 X1) \Rightarrow (((g1_orders_2 (u1_struct_0 \\
& X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 X1) (u1_orders_2 \\
& X1)) \wedge ((g1_orders_2 (u1_struct_0 X2) (u1_orders_2 X2) = g1_orders_2 \\
& (u1_struct_0 X3) (u1_orders_2 X3)) \wedge (v5_yellow_0 X2 X0))) \Rightarrow (v5_yellow_0 \\
& X3 X1))))))
\end{aligned}$$