

t21_waybel21 (TMTi-
RAD4NW98kJQefTnBgosbXaeoQY1NjQW)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v4_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v8_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_yellow_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((\\ g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 \\ X1) (u1_orders_2 X1)) \Rightarrow (\forall X2.(r1_yellow_0 X0 X2) \Rightarrow (k1_yellow_0 \\ X0 X2 = k1_yellow_0 X1 X2)))) \end{aligned} \tag{1}$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ (m1_yellow_0 X1 X0) \Rightarrow ((v8_yellow_0 X1 X0) \Leftrightarrow (\forall X2.(m1_subset_1 \\ X2 (k1_zfmisc_1 (u1_struct_0 X1))) \Rightarrow ((r1_yellow_0 X0 X2) \Rightarrow (k1_yellow_0 \\ X0 X2 \in u1_struct_0 X1)))) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge (l1_orders_2 X1)) \Rightarrow (\forall X2.((\neg v2_struct_0 \\ & X2) \wedge ((v4_yellow_0 X2 X0) \wedge (m1_yellow_0 X2 X0)))) \Rightarrow (\forall X3.(\\ & (\neg v2_struct_0 X3) \wedge ((v4_yellow_0 X3 X1) \wedge (m1_yellow_0 X3 X1)))) \Rightarrow \\ & (((g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 \\ & (u1_struct_0 X1) (u1_orders_2 X1)) \wedge ((u1_struct_0 X2 = u1_struct_0 \\ & X3) \wedge (v8_yellow_0 X2 X0))) \Rightarrow (v8_yellow_0 X3 X1)))) \end{aligned}$$