

t9_waybel_8

(TMJACp5ereKSmASAZf2CkuQAJ88D162xKgz)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_orders_2 : \iota \Rightarrow o$ be given. Let $v5_orders_2 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ 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 $v24_waybel_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_waybel_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_waybel_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v5_orders_2 \\
 & X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge ((v3_orders_2 \\
 & X1) \wedge ((v5_orders_2 X1) \wedge (l1_orders_2 X1)))) \Rightarrow (((g1_orders_2 (\\
 & u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 X1) \\
 & (u1_orders_2 X1)) \wedge (v24_waybel_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 \\
 & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 \\
 & X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow (\forall X5. \\
 & (m1_subset_1 X5 (u1_struct_0 X1)) \Rightarrow (((X2 = X4) \wedge ((X3 = X5) \wedge (r1_waybel_3 \\
 & X0 X2 X3)))) \Rightarrow (r1_waybel_3 X1 X4 X5)))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge (l1_orders_2 \\
 & X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((v1_waybel_3 \\
 & X1 X0) \Leftrightarrow (r1_waybel_3 X0 X1 X1)))
 \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v5_orders_2 \\
 & X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge ((v3_orders_2 \\
 & X1) \wedge ((v5_orders_2 X1) \wedge (l1_orders_2 X1)))) \Rightarrow (((g1_orders_2 (\\
 & u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 X1) \\
 & (u1_orders_2 X1)) \wedge (v24_waybel_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 \\
 & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 \\
 & X1)) \Rightarrow (((X2 = X3) \wedge (v1_waybel_3 X2 X0)) \Rightarrow (v1_waybel_3 X3 X1))))))
 \end{aligned}$$