

t5_waybel_3

(TMSiQdHd7UsFb44v7GqirsW5bmLYEcsF1UU)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ 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 $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_waybel_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge (v3_orders_2 X0) \wedge (v4_orders_2 \\
& X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 \\
& (u1_struct_0 X0)) \Rightarrow (((r3_orders_2 X0 X1 X2) \wedge (r1_waybel_3 X0 X2 \\
& X3) \wedge (r3_orders_2 X0 X3 X4)) \Rightarrow (r1_waybel_3 X0 X1 X4))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge (v3_orders_2 X0) \wedge (v5_orders_2 \\
& X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_waybel_3 \\
& X0 X1 X2) \Rightarrow (r3_orders_2 X0 X1 X2))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge (v3_orders_2 \\
& X0) \wedge (l1_orders_2 X0)) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge \\
& m1_subset_1 X2 (u1_struct_0 X0))) \Rightarrow (r3_orders_2 X0 X1 X1)
\end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge (v3_orders_2 X0) \wedge (v4_orders_2 \\
& X0) \wedge (v5_orders_2 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. (m1_subset_1 \\
& X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (((r1_waybel_3 \\
& X0 X1 X2) \wedge (r1_waybel_3 X0 X2 X3)) \Rightarrow (r1_waybel_3 X0 X1 X3))))))
\end{aligned}$$