

t22_waybel_8 (TMFg- gtF5L9sQJtUMkKWaXrV3BHkehDwsF16)

October 27, 2020

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 $v1_lattice3 : \iota \Rightarrow o$ be given. Let $v2_lattice3 : \iota \Rightarrow o$ be given. Let $v1_yellow_0 : \iota \Rightarrow o$ be given. Let $v2_waybel_1 : \iota \Rightarrow o$ be given. Let $v2_waybel_8 : \iota \Rightarrow o$ 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 $v4_waybel_7 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_waybel_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_waybel_8 : \iota \Rightarrow o$ be given. Let $v3_waybel_3 : \iota \Rightarrow o$ be given. Let $v5_waybel_7 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_waybel_4 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_yellow_0 X0) \wedge ((v2_waybel_1 X0) \wedge ((v1_lattice3 X0) \wedge \\ & ((v2_lattice3 X0) \wedge ((v3_waybel_3 X0) \wedge (l1_orders_2 X0)))))))) \Rightarrow \\ & ((\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((v4_waybel_7 \\ & X1 X0) \Rightarrow (v5_waybel_6 X1 X0))) \Rightarrow (v5_waybel_7 (k1_waybel_4 X0) X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge ((v1_yellow_0 X0) \wedge \\ & ((v2_waybel_8 X0) \wedge (l1_orders_2 X0)))))))) \Rightarrow ((v3_waybel_8 X0) \Leftrightarrow \\ & (v5_waybel_7 (k1_waybel_4 X0) X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_orders_2 X0) \Rightarrow (((v3_orders_2 X0) \wedge ((v4_orders_2 \\ & X0) \wedge ((v5_orders_2 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge \\ & (v2_waybel_8 X0)))))) \Rightarrow ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge \\ & ((v5_orders_2 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge (v3_waybel_3 \\ & X0)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge ((v1_yellow_0 X0) \wedge \\ & ((v2_waybel_1 X0) \wedge ((v2_waybel_8 X0) \wedge (l1_orders_2 X0)))))))) \Rightarrow \\ & ((\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((v4_waybel_7 \\ & X1 X0) \Rightarrow (v5_waybel_6 X1 X0))) \Rightarrow (v3_waybel_8 X0)) \end{aligned}$$