

t36_waybel_6 (TMQDT-
tUZ7EdVPPcDrfmCURzisBsPmPjHgK8)

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 $v1_yellow_0 : \iota \Rightarrow o$ be given. Let $v1_lattice3 : \iota \Rightarrow o$ be given. Let $v2_lattice3 : \iota \Rightarrow o$ be given. Let $v3_waybel_3 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v2_waybel_1 : \iota \Rightarrow o$ be given. Let $v9_waybel_1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_lattice3 : \iota \Rightarrow o$ be given. Let $v2_waybel_2 : \iota \Rightarrow o$ be given. Let $v24_waybel_0 : \iota \Rightarrow o$ be given. Let $v2_waybel_3 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow & (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 \\ X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 X0) \wedge ((v2_waybel_1 X0) \wedge \\ ((v3_lattice3 X0) \wedge (v2_waybel_2 X0))))))) \Rightarrow & ((\neg v2_struct_0 X0) \wedge \\ ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 X0) \wedge (v9_waybel_1 \\ X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (((\neg v2_struct_0 X0) \wedge (v9_waybel_1 X0)) \Rightarrow ((\neg v2_struct_0 X0) \wedge (v2_waybel_1 X0))) \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow & (((v3_orders_2 X0) \wedge ((v4_orders_2 \\ X0) \wedge ((v5_orders_2 X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge \\ ((v2_lattice3 X0) \wedge (v3_waybel_3 X0))))))) \Rightarrow & ((v3_orders_2 X0) \wedge \\ ((v4_orders_2 X0) \wedge ((v5_orders_2 X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 \\ X0) \wedge ((v2_lattice3 X0) \wedge (v2_waybel_2 X0)))))))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge (v3_waybel_3 X0))) \Rightarrow ((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v24_waybel_0 X0) \wedge (v2_waybel_3 X0)))))) \tag{4}$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v1_lattice3 X0) \Rightarrow (\neg v2_struct_0 X0)) \tag{5}$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow & (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 \\ & X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 X0) \wedge ((v1_lattice3 X0) \wedge \\ & ((v1_yellow_0 X0) \wedge (v24_waybel_0 X0))))))) \Rightarrow ((\neg v2_struct_0 X0) \wedge \\ & ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 X0) \wedge (v3_lattice3 \\ & X0)))))) \end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned} \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge \\ & ((v3_waybel_3 X0) \wedge (l1_orders_2 X0)))))))) \Rightarrow ((v2_waybel_1 X0) \Leftrightarrow \\ & (v9_waybel_1 X0)) \end{aligned}$$