

t45_waybel_7 (TMXK- meMJA5HjCyP5VQr93kM1sqE7ngSGT3t)

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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 $v5_waybel_7 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_waybel_4 : \iota \Rightarrow \iota$ 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 $r1_waybel_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r3_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge \\ & ((v3_waybel_3 X0) \wedge (l1_orders_2 X0))))))) \Rightarrow ((v5_waybel_7 (k1_waybel_4 \\ & X0) X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((v4_waybel_7 \\ & X1 X0) \Leftrightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow \neg(r1_waybel_3 X0 (k12_lattice3 \\ & X0 X2 X3) X1) \wedge (\neg r3_orders_2 X0 X2 X1) \wedge (\neg r3_orders_2 X0 X3 X1))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge \\ & ((v3_waybel_3 X0) \wedge (l1_orders_2 X0))))))) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 (u1_struct_0 X0)) \Rightarrow \neg(v5_waybel_7 (k1_waybel_4 X0) X0) \wedge ((\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow \neg(r1_waybel_3 X0 (k12_lattice3 X0 X2 X3) X1) \wedge \\ & ((\neg r3_orders_2 X0 X2 X1) \wedge (\neg r3_orders_2 X0 X3 X1)))))) \wedge (\neg v5_waybel_6 \\ & X1 X0))) \end{aligned} \quad (2)$$

Theorem 1

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