

t26_waybel_3
(TMQeMK5e4bberVt4Af6mtoYpqSWcm4Reg91)

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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 $v1_lattice3 : \iota \Rightarrow o$ be given. Let $v2_lattice3 : \iota \Rightarrow o$ be given. Let $v3_lattice3 : \iota \Rightarrow o$ 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 $v1_waybel_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_waybel_3 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $r2_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_waybel_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_waybel_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_yellow_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v5_orders_2 \\ X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (r2_lattice3 X0 (k1_waybel_3 X0 X1) X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge (l1_orders_2 \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((X1 \in k1_waybel_3 X0 X2) \Leftrightarrow (r1_waybel_3 \\ X0 X1 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v5_orders_2 X0) \wedge ((v3_lattice3 \\ X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(X1 = k1_yellow_0 X0 X2) \Leftrightarrow ((r2_lattice3 X0 X2 X1) \wedge \\ (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow ((r2_lattice3 \\ X0 X2 X3) \Rightarrow (r1_orders_2 X0 X1 X3)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.\forall X2.(m1_subset_1 \\ X2 (u1_struct_0 X0)) \Rightarrow ((r2_lattice3 X0 X1 X2) \Leftrightarrow (\forall X3.(m1_subset_1 \\ X3 (u1_struct_0 X0)) \Rightarrow ((X3 \in X1) \Rightarrow (r1_orders_2 X0 X3 X2)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge (l1_orders_2 X0))) \Rightarrow ((v2_waybel_3 X0) \Leftrightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (X1 = k1_yellow_0 X0 (k1_waybel_3 X0 X1)))) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge (l1_orders_2 X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((v1_waybel_3 X1 X0) \Leftrightarrow (r1_waybel_3 X0 X1 X1))) \quad (6)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v1_lattice3 X0) \Rightarrow (\neg v2_struct_0 X0)) \quad (7)$$

Theorem 1

$$\forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge ((v3_lattice3 X0) \wedge (l1_orders_2 X0))))))) \Rightarrow ((\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (v1_waybel_3 X1 X0)) \Rightarrow (v2_waybel_3 X0))$$