

t26_waybel28

(TMYwsrZukeDgZ36AXaW31t3oBcYG3je7yBs)

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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 $v1_lattice3 : \iota \Rightarrow o$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_waybel17 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_yellow_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_waybel28 : \iota \Rightarrow \iota$ be given. Let $m2_yellow_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_waybel11 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_yellow_6 : \iota \Rightarrow \iota$ be given. Let $v7_waybel_0 : \iota \Rightarrow o$ be given. Let $l1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\
 & X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge ((v3_lattice3 X0) \wedge \\
 & (l1_orders_2 X0)))))) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_waybel_0 \\
 & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \Rightarrow (\forall X2. \\
 & (m2_yellow_6 X2 X0 (k4_waybel17 X0 X1)) \Rightarrow (k1_waybel11 X0 X2 = k1_yellow_0 \\
 & X0 X1)))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\
 & X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_waybel_0 \\
 & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \Rightarrow (k4_waybel17 \\
 & X0 X1 \in k6_yellow_6 X0)
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge ((v3_lattice3 X0) \wedge \\ & (l1_orders_2 X0)))))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v4_orders_2 \\ & X1) \wedge ((v7_waybel_0 X1) \wedge (l1_waybel_0 X1 X0)))) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0) \Rightarrow ((X1 \in k6_yellow_6 X0) \Rightarrow ((k4_tarski X1 X2 \in \\ & k3_waybel28 X0) \Leftrightarrow (\forall X3.(m2_yellow_6 X3 X0 X1) \Rightarrow ((X3 \in k6_yellow_6 \\ & X0) \Rightarrow (X2 = k1_waybel11 X0 X3)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge \\ & ((v4_orders_2 X0) \wedge (l1_orders_2 X0)))) \wedge ((\neg v1_xboole_0 X1) \wedge (\\ & (v1_waybel_0 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow ((v4_orders_2 (k4_waybel17 X0 X1)) \wedge (v6_waybel_0 (k4_waybel17 \\ & X0 X1) X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge \\ & (l1_orders_2 X0))) \wedge ((\neg v1_xboole_0 X1) \wedge ((v1_waybel_0 X1 X0) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \Rightarrow ((\neg v2_struct_0 \\ & (k4_waybel17 X0 X1)) \wedge ((v3_orders_2 (k4_waybel17 X0 X1)) \wedge ((v6_waybel_0 \\ & (k4_waybel17 X0 X1) X0) \wedge (v7_waybel_0 (k4_waybel17 X0 X1)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \wedge \\ & ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow ((v6_waybel_0 (k4_waybel17 X0 X1) X0) \wedge (l1_waybel_0 (\\ & k4_waybel17 X0 X1) X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (l1_orders_2 X0) \Rightarrow (m1_subset_1 (k1_yellow_0 X0 X1) (u1_struct_0 X0)) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0. (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\ & X0) \wedge ((v5_orders_2 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge \\ & ((v3_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow (\forall X1. ((\neg v1_xboole_0 \\ & X1) \wedge ((v1_waybel_0 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow (k4_tarski (k4_waybel17 X0 X1) (k1_yellow_0 X0 X1) \in k3_waybel28 \\ & X0)) \end{aligned}$$