

t12_waybel13

(TMKsPSPiJXLk7ZPqp7gXiNevK684KGXTcrc)

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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 $v1_yellow_0 : \iota \Rightarrow o$ 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 $k2_yellow_1 : \iota \Rightarrow \iota$ be given. Let $k7_waybel_0 : \iota \Rightarrow \iota$ be given. Let $v1_waybel_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v12_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v14_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_yellow_1 : \iota \Rightarrow \iota$ be given. Let $k1_wellord2 : \iota \Rightarrow \iota$ be given. Let $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\ & X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_waybel_0 \\ & X1 X0) \wedge ((v12_waybel_0 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow ((v14_waybel_0 X1 X0) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (\\ & u1_struct_0 X0)) \wedge (X1 = k5_waybel_0 X0 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge ((v3_orders_2 X1) \wedge \\ & ((v4_orders_2 X1) \wedge (l1_orders_2 X1)))) \Rightarrow ((m1_subset_1 X0 (u1_struct_0 \\ & (k2_yellow_1 (k7_waybel_0 X1)))) \Leftrightarrow ((\neg v1_xboole_0 X0) \wedge ((v1_waybel_0 \\ & X0 X1) \wedge ((v12_waybel_0 X0 X1) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ & X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_lattice3 X0) \wedge ((v1_yellow_0 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\ & (\forall X1. (m1_subset_1 X1 (u1_struct_0 (k2_yellow_1 (k7_waybel_0 \\ & X0)))) \Rightarrow ((v1_waybel_3 X1 (k2_yellow_1 (k7_waybel_0 X0))) \Leftrightarrow ((\neg \\ & v1_xboole_0 X1) \wedge ((v1_waybel_0 X1 X0) \wedge ((v12_waybel_0 X1 X0) \wedge \\ & (v14_waybel_0 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.k1_yellow_1 X0 = k1_wellord2 X0 \quad (4)$$

Assume the following.

$$\forall X0.k2_yellow_1 X0 = g1_orders_2 X0 (k1_yellow_1 X0) \quad (5)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v1_lattice3 X0) \Rightarrow (\neg v2_struct_0 X0)) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_lattice3 X0) \wedge ((v1_yellow_0 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k2_yellow_1 (k7_waybel_0 \\ & X0)))) \Rightarrow ((v1_waybel_3 X1 (k2_yellow_1 (k7_waybel_0 X0))) \Leftrightarrow (\exists X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \wedge (X1 = k5_waybel_0 X0 X2)))) \end{aligned}$$