

t5_waybel13 (TMXVicXoHiNx- axkzFNe6JwNQpuAnP9F1ASQ)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_orders_2 : \iota \Rightarrow o$ be given. Let $v5_orders_2 : \iota \Rightarrow o$ be given. Let $v1_yellow_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $v24_waybel_0 : \iota \Rightarrow o$ be given. Let $k1_waybel_8 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_waybel_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_orders_2 : \iota \Rightarrow o$ be given. Let $v4_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v3_orders_2 \\ & X1) \wedge ((v5_orders_2 X1) \wedge (l1_orders_2 X1)))) \Rightarrow (((g1_orders_2 (\\ & u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 X1) \\ & (u1_orders_2 X1)) \wedge (v24_waybel_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\ & X1)) \Rightarrow (((X2 = X3) \wedge (v1_waybel_3 X2 X0)) \Rightarrow (v1_waybel_3 X3 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge (l1_orders_2 \\ & X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v3_orders_2 X1) \wedge (l1_orders_2 \\ & X1))) \Rightarrow (((g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 \\ & (u1_struct_0 X1) (u1_orders_2 X1)) \wedge (v24_waybel_0 X0)) \Rightarrow (v24_waybel_0 \\ & X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))\Rightarrow(\forall X2.\forall X3.(g1_orders_2 X0 X1 = g1_orders_2 X2 X3)\Rightarrow((X0 = X2)\wedge(X1 = X3))) \quad (5)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0)\Rightarrow(m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (6)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0)\Rightarrow(\forall X1.(m1_yellow_0 X1 X0)\Rightarrow(l1_orders_2 X1)) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 X0)))\Rightarrow((v1_orders_2 (k1_waybel_8 X0))\wedge((v4_yellow_0 (k1_waybel_8 X0) X0)\wedge(m1_yellow_0 (k1_waybel_8 X0) X0))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow(X2 \in X1)) \quad (9)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 X0)))\Rightarrow(\forall X1.((v1_orders_2 X1)\wedge((v4_yellow_0 X1 X0)\wedge(m1_yellow_0 X1 X0)))\Rightarrow((X1 = k1_waybel_8 X0)\Leftrightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow((X2 \in u1_struct_0 X1)\Leftrightarrow(v1_waybel_3 X2 X0)))))) \quad (10)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0)\Rightarrow(\forall X1.(l1_orders_2 X1)\Rightarrow((m1_yellow_0 X1 X0)\Leftrightarrow((r1_tarski (u1_struct_0 X1) (u1_struct_0 X0))\wedge(r1_tarski (u1_orders_2 X1) (u1_orders_2 X0)))))) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1)\Leftrightarrow((r1_tarski X0 X1)\wedge(r1_tarski X1 X0)) \quad (12)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge((v5_orders_2 X0)\wedge((v1_yellow_0 X0)\wedge(l1_orders_2 X0))))))\Rightarrow(\forall X1.((\neg v2_struct_0 X1)\wedge((v3_orders_2 X1)\wedge((v5_orders_2 X1)\wedge(l1_orders_2 X1))))\Rightarrow(((g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 X1) (u1_orders_2 X1))\wedge(v24_waybel_0 X0))\Rightarrow(u1_struct_0 (k1_waybel_8 X0) = u1_struct_0 (k1_waybel_8 X1))))))$$