

l1_waybel_5

(TMcJpyzgV3saXv68fwJ15SkTp3jmPMh8dtk)

October 27, 2020

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 $v2_lattice3 : \iota \Rightarrow o$ be given. Let $v3_waybel_3 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_waybel_3 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $r3_orders_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_yellow_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $r1_waybel_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_waybel_3 : \iota \Rightarrow o$ be given. Let $v24_waybel_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\ & X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_waybel_3 \\ & X0 X1 X2) \Rightarrow (\forall X3.((\neg v1_xboole_0 X3) \wedge ((v1_waybel_0 X3 X0) \wedge \\ & ((v12_waybel_0 X3 X0) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow ((r3_orders_2 X0 X2 (k1_yellow_0 X0 X3)) \Rightarrow (X1 \in X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 \\ & X0) \wedge (l1_orders_2 X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (\\ & m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (r3_orders_2 X0 X1 X1) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge \\ & ((v3_waybel_3 X0) \wedge (l1_orders_2 X0)))) \wedge (m1_subset_1 X1 (u1_struct_0 \\ & X0))) \Rightarrow ((\neg v1_xboole_0 (k1_waybel_3 X0 X1)) \wedge (v1_waybel_0 (k1_waybel_3 \\ & X0 X1) X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge((v4_orders_2 X0)\wedge(l1_orders_2 X0))))\wedge(m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow(v12_waybel_0 (k1_waybel_3 X0 X1) X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 X0)))\wedge(m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow(m1_subset_1 (k1_waybel_3 X0 X1) (k1_zfmisc_1 (u1_struct_0 X0))) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 X0)))\Rightarrow((v2_waybel_3 X0)\Leftrightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)\Rightarrow(k1_waybel_3 X0 X1 = k1_yellow_0 X0 (k1_waybel_3 X0 X1)))) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 X0)))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)\Rightarrow(k1_waybel_3 X0 X1 = ReplSep (toset (\lambda X2 : \iota.m1_subset_1 X2 (u1_struct_0 X0)) (\lambda X2 : \iota.r1_waybel_3 X0 X2 X1) (\lambda X2 : \iota.X2)))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow(X2 \in X1)) \quad (8)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0)\Rightarrow(((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(v3_waybel_3 X0)))\Rightarrow((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge((v24_waybel_0 X0)\wedge(v2_waybel_3 X0)))) \quad (9)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0)\Rightarrow((v2_lattice3 X0)\Rightarrow(\neg v2_struct_0 X0)) \quad (10)$$

Theorem 1

$$\forall X0.(((v3_orders_2 X0)\wedge((v4_orders_2 X0)\wedge((v5_orders_2 X0)\wedge((v2_lattice3 X0)\wedge((v3_waybel_3 X0)\wedge(l1_orders_2 X0))))))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)\Rightarrow(((\neg v1_xboole_0 (k1_waybel_3 X0 X1))\wedge((v1_waybel_0 (k1_waybel_3 X0 X1) X0)\wedge((v12_waybel_0 (k1_waybel_3 X0 X1) X0)\wedge(m1_subset_1 (k1_waybel_3 X0 X1) (k1_zfmisc_1 (u1_struct_0 X0))))))\wedge((r3_orders_2 X0 X1 (k1_yellow_0 X0 (k1_waybel_3 X0 X1)))\wedge(\forall X2.((\neg v1_xboole_0 X2)\wedge((v1_waybel_0 X2 X0)\wedge((v12_waybel_0 X2 X0)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))))))\Rightarrow((r3_orders_2 X0 X1 (k1_yellow_0 X0 X2))\Rightarrow(r1_tarski (k1_waybel_3 X0 X1) X2)))))) \quad (11)$$