

t13_waybel11

(TMJshzkgDXfjg1WMhYA57RETyMmihj9Yo65)

October 27, 2020

Let $v2_pre_topc : \iota \Rightarrow o$ 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 $v24_waybel_0 : \iota \Rightarrow o$ be given. Let $v1_lattice3 : \iota \Rightarrow o$ be given. Let $v2_lattice3 : \iota \Rightarrow o$ be given. Let $v4_waybel11 : \iota \Rightarrow o$ be given. Let $l1_waybel_9 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v13_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m2_connsp_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.((v13_waybel_0 \\ & X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((\neg X1 \in \\ & X2) \Rightarrow (r1_xboole_0 X2 (k5_waybel_0 X0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (l1_pre_topc X1) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 \\ & X1))) \Rightarrow (((v3_pre_topc X3 X1) \Rightarrow (k1_tops_1 X1 X3 = X3)) \wedge ((k1_tops_1 \\ & X0 X2 = X2) \Rightarrow (v3_pre_topc X2 X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow ((r1_xboole_0 X1 X2) \Leftrightarrow (r1_tarSKI \\ & X1 (k3_subset_1 X0 X2)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc\ X0)\wedge((v3_orders_2\ X0)\wedge((v4_orders_2 \\ X0)\wedge((v5_orders_2\ X0)\wedge((v24_waybel_0\ X0)\wedge((v1_lattice3\ X0)\wedge \\ ((v2_lattice3\ X0)\wedge((v4_waybel11\ X0)\wedge(l1_waybel_9\ X0))))))))))\Rightarrow \\ (\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow(v3_pre_topc\ (\\ k3_subset_1\ (u1_struct_0\ X0)\ (k5_waybel_0\ X0\ X1))\ X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l1_waybel_9\ X0)\Rightarrow((l1_pre_topc\ X0)\wedge(l1_orders_2\ X0)) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((\neg v2_struct_0\ X0)\wedge(l1_orders_2\ X0))\wedge \\ (m1_subset_1\ X1\ (u1_struct_0\ X0)))\Rightarrow(m1_subset_1\ (k5_waybel_0 \\ X0\ X1)\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0))\Rightarrow(m1_subset_1 \\ (k3_subset_1\ X0\ X1)\ (k1_zfmisc_1\ X0)) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0))\Rightarrow(\forall X1. \\ (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow(\forall X2. \\ (m1_subset_1\ X2\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow((m2_connsp_2 \\ X2\ X0\ X1)\Leftrightarrow(r1_tarski\ X1\ (k1_tops_1\ X0\ X2)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(l1_orders_2\ X0)\Rightarrow((v2_lattice3\ X0)\Rightarrow(\neg v2_struct_0\ X0)) \quad (9)$$

Theorem 1

$$\begin{aligned} \forall X0.((v2_pre_topc\ X0)\wedge((v3_orders_2\ X0)\wedge((v4_orders_2 \\ X0)\wedge((v5_orders_2\ X0)\wedge((v24_waybel_0\ X0)\wedge((v1_lattice3\ X0)\wedge \\ ((v2_lattice3\ X0)\wedge((v4_waybel11\ X0)\wedge(l1_waybel_9\ X0))))))))))\Rightarrow \\ (\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow(\forall X2.((\\ v13_waybel_0\ X2\ X0)\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (u1_struct_0 \\ X0))))\Rightarrow((\neg X1 \in X2)\Rightarrow(m2_connsp_2\ (k3_subset_1\ (u1_struct_0\ X0) \\ (k5_waybel_0\ X0\ X1))\ X0\ X2)))))) \end{aligned}$$