

t34_waybel_3

(TMHx5Ve1V3ZuVmMu61ki1tAxWC8m3RfL5nD)

October 27, 2020

Let $v2_struct.0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ 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 $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $r1_waybel.3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $v1_tops.2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_setfam.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_finset.1 : \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $v1_xboole.0 : \iota \Rightarrow o$ be given. Let $r3_orders.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_yellow.0 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v7_struct.0 : \iota \Rightarrow o$ be given. Let $v1_orders.2 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole.0 X0) \Rightarrow (\forall X1.(m1_subset.1 X1 (u1_struct.0 \\ (k2_yellow.1 X0))) \Rightarrow (\forall X2.(m1_subset.1 X2 (u1_struct.0 \\ (k2_yellow.1 X0))) \Rightarrow ((r3_orders.2 (k2_yellow.1 X0) X1 X2) \Leftrightarrow (r1_tarski \\ X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset.1 X0 (k1_zfmisc.1 X1)) \Leftrightarrow (r1_tarski X0 X1) \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ (m1_subset.1 X1 (k1_zfmisc.1 (k1_zfmisc.1 (u1_struct.0 X0)))) \Rightarrow \\ ((v1_tops.2 X1 X0) \Leftrightarrow (m1_subset.1 X1 (k1_zfmisc.1 (u1_struct.0 \\ (k2_yellow.1 (u1_pre_topc X0))))))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct.0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1.(m1_subset.1 X1 (k1_zfmisc.1 (u1_struct.0 \\ (k2_yellow.1 (u1_pre_topc X0)))))) \Rightarrow (k1_yellow.0 (k2_yellow.1 \\ (u1_pre_topc X0)) X1 = k3_tarski X1) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge ((v3_lattice3 X0) \wedge \\ & (l1_orders_2 X0)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_waybel_3 \\ & X0 X1 X2) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 \\ & X0)) \Rightarrow (\neg(r3_orders_2 X0 X2 (k1_yellow_0 X0 X3)) \wedge (\forall X4.(\\ & (v1_finset_1 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow \\ & (\neg(r1_tarski X4 X3) \wedge (r3_orders_2 X0 X1 (k1_yellow_0 X0 X4)))))))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. \forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Rightarrow (k5_setfam_1 X0 X1 = k3_tarski X1) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow ((\neg v7_struct_0 (k2_yellow_1 (u1_pre_topc X0))) \wedge ((v1_orders_2 \\ & (k2_yellow_1 (u1_pre_topc X0))) \wedge (v3_lattice3 (k2_yellow_1 (\\ & u1_pre_topc X0)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(\neg v1_xboole_0 X0) \Rightarrow ((\neg v2_struct_0 (k2_yellow_1 X0)) \wedge (v1_orders_2 (k2_yellow_1 X0))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_orders_2 (k2_yellow_1 X0)) \wedge ((v3_orders_2 (k2_yellow_1 X0)) \wedge ((v4_orders_2 (k2_yellow_1 X0)) \wedge (v5_orders_2 (k2_yellow_1 X0)))) \quad (9)$$

Assume the following.

$$\forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\neg v1_xboole_0 (u1_pre_topc X0)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_orders_2 (k2_yellow_1 X0)) \wedge (l1_orders_2 (k2_yellow_1 X0)) \quad (11)$$

Assume the following.

$$\forall X0. \forall X1.(l1_orders_2 X0) \Rightarrow (m1_subset_1 (k1_yellow_0 X0 X1) (u1_struct_0 X0)) \quad (12)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (((\neg v2_struct_0 X0) \wedge (v3_lattice3 X0)) \Rightarrow ((\neg v2_struct_0 X0) \wedge ((v1_lattice3 X0) \wedge (v2_lattice3 X0)))) \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k2_yellow_1 \\ & (u1_pre_topc X0)))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ & (k2_yellow_1 (u1_pre_topc X0)))) \Rightarrow ((r1_waybel_3 (k2_yellow_1 \\ & (u1_pre_topc X0)) X1 X2) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 \\ & (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow (\neg(v1_tops_2 X3 X0) \wedge ((r1_tarski \\ & X2 (k5_setfam_1 (u1_struct_0 X0) X3)) \wedge (\forall X4.((v1_finset_1 \\ & X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 X3))) \Rightarrow (\neg r1_tarski X1 (k3_tarski \\ & X4)))))))))) \end{aligned}$$