

t8_tdlat_3

(TMF9fvXHuZiZLz89k8A7Z2v6KAiqfyz3aiq)

October 27, 2020

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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v4_tops_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6_tops_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_tops_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (((v4_tops_1 \\ & X1 X0) \wedge (r1_tarski (k2_pre_topc X0 (k1_tops_1 X0 X1)) (k1_tops_1 \\ & X0 (k2_pre_topc X0 X1)))) \Rightarrow ((v6_tops_1 X1 X0) \wedge (v5_tops_1 X1 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (l1_pre_topc X1) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 \\ & X1))) \Rightarrow (((v3_pre_topc X3 X1) \wedge (v4_tops_1 X3 X1)) \Rightarrow (v6_tops_1 X3 \\ & X1)) \wedge ((v6_tops_1 X2 X0) \Rightarrow ((v3_pre_topc X2 X0) \wedge (v4_tops_1 X2 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (l1_pre_topc X1) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 \\ & X1))) \Rightarrow (((v4_pre_topc X3 X1) \wedge (v4_tops_1 X3 X1)) \Rightarrow (v5_tops_1 X3 \\ & X1)) \wedge ((v5_tops_1 X2 X0) \Rightarrow ((v4_pre_topc X2 X0) \wedge (v4_tops_1 X2 X0)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0.((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0))\Rightarrow(\forall X1. \\ (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow(((v4_tops_1 \\ X1\ X0)\wedge(r1_tarSKI\ (k2_pre_topc\ X0\ (k1_tops_1\ X0\ X1))\ (k1_tops_1 \\ X0\ (k2_pre_topc\ X0\ X1))))\Rightarrow((v3_pre_topc\ X1\ X0)\wedge(v4_pre_topc\ X1 \\ X0)))) \end{aligned}$$