

t1_isomichi
(TMPs9nLzEJbYAS15Q3zF4P25DyFBWDZTUon)

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 $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (((v3_pre_topc \\ & X1 X0) \vee (v3_pre_topc X2 X0)) \Rightarrow (k9_subset_1 (u1_struct_0 X0) (k1_tops_1 \\ & X0 (k2_pre_topc X0 X1)) (k1_tops_1 X0 (k2_pre_topc X0 X2)) = k1_tops_1 \\ & X0 (k2_pre_topc X0 (k9_subset_1 (u1_struct_0 X0) X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k9_subset_1 \\ & (u1_struct_0 X0) (k1_tops_1 X0 X1) (k1_tops_1 X0 X2) = k1_tops_1 \\ & X0 (k9_subset_1 (u1_struct_0 X0) X1 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow (v3_pre_topc \\ & (k1_tops_1 X0 X1) X0) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1_pre_topc X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 X0)))) \Rightarrow (m1_subset_1 (k1_tops_1 X0 X1) (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0))\Rightarrow(\forall X1. \\ & (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow(\forall X2. \\ & (m1_subset_1\ X2\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow(k9_subset_1 \\ & (u1_struct_0\ X0)\ (k1_tops_1\ X0\ (k2_pre_topc\ X0\ (k1_tops_1\ X0\ X1))) \\ & (k1_tops_1\ X0\ (k2_pre_topc\ X0\ (k1_tops_1\ X0\ X2))) = k1_tops_1\ X0 \\ & (k2_pre_topc\ X0\ (k1_tops_1\ X0\ (k9_subset_1\ (u1_struct_0\ X0)\ X1 \\ & X2)))))) \end{aligned}$$