

t36_tex_1

(TMWgmLy6er5rmbzidxh4RuofLpJshy2bnhU)

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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 $v1_xboole_0 : \iota \Rightarrow o$ 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 $v2_tops_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_tdlat_3 : \iota \Rightarrow o$ be given. Let $k6_tmap_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $k5_tmap_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v3_tops_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow ((u1_struct_0 (k6_tmap_1 X0 X1) = u1_struct_0 X0) \wedge (u1_pre_topc \\ & (k6_tmap_1 X0 X1) = k5_tmap_1 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\ & (k6_tmap_1 X0 (k3_subset_1 (u1_struct_0 X0) X1)))))) \Rightarrow (((X2 = X1) \wedge \\ & (v2_tops_1 X1 X0)) \Rightarrow ((v2_tops_1 X2 (k6_tmap_1 X0 (k3_subset_1 (\\ & u1_struct_0 X0) X1))) \wedge (v4_pre_topc X2 (k6_tmap_1 X0 (k3_subset_1 \\ & (u1_struct_0 X0) X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge \\ & (l1_pre_topc X0))) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))) \Rightarrow ((\neg v2_struct_0 (k6_tmap_1 X0 X1)) \wedge ((v1_pre_topc (k6_tmap_1 \\ & X0 X1)) \wedge (v2_pre_topc (k6_tmap_1 X0 X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge((v2_pre_topc X0)\wedge \\ & (l1_pre_topc X0)))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))))\Rightarrow((v1_pre_topc (k6_tmap_1 X0 X1))\wedge((v2_pre_topc (k6_tmap_1 \\ & X0 X1))\wedge(l1_pre_topc (k6_tmap_1 X0 X1)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(m1_subset_1 (k3_subset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge((v2_pre_topc X0)\wedge(l1_pre_topc \\ & X0)))\Rightarrow((v3_tdlat_3 X0)\Leftrightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge(m1_subset_1 \\ & X1 (k1_zfmisc_1 (u1_struct_0 X0))))\Rightarrow(\neg v3_tops_1 X1 X0))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0)\wedge(l1_pre_topc X0))\Rightarrow(\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))\Rightarrow(((v4_pre_topc \\ & X1 X0)\wedge(v2_tops_1 X1 X0))\Rightarrow(v3_tops_1 X1 X0))) \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge((v2_pre_topc X0)\wedge(l1_pre_topc \\ & X0)))\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 X0))))\Rightarrow(\neg(v2_tops_1 X1 X0)\wedge(v3_tdlat_3 (k6_tmap_1 \\ & X0 (k3_subset_1 (u1_struct_0 X0) X1)))))) \end{aligned}$$