

t83_tdlat_2 (TMZkmeiFaQm- FyNj7cSmTP66UBQrQy7Qkfq6)

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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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v3_tdlat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6_tops_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_setfam_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_setfam_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_tdlat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & (u1_struct_0 X0)))) \Rightarrow ((v3_tdlat_2 X1 X0) \Rightarrow (v1_tdlat_2 X1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & (u1_struct_0 X0)))) \Rightarrow ((v1_tdlat_2 X1 X0) \Rightarrow ((r1_tarski (k1_tops_1 \\ & X0 (k2_pre_topc X0 (k6_setfam_1 (u1_struct_0 X0) X1))) (k6_setfam_1 \\ & (u1_struct_0 X0) X1)) \wedge (k1_tops_1 X0 (k2_pre_topc X0 (k1_tops_1 \\ & X0 (k6_setfam_1 (u1_struct_0 X0) X1))) = k1_tops_1 X0 (k6_setfam_1 \\ & (u1_struct_0 X0) X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (v6_tops_1 (\\ & k1_tops_1 X0 (k2_pre_topc X0 X1)) X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0))) \Rightarrow (m1_subset_1 (k6_setfam_1 X0 X1) (k1_zfmisc_1 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0))) \Rightarrow (m1_subset_1 (k5_setfam_1 X0 X1) (k1_zfmisc_1 X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((l1_pre_topc\ X0)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))))\Rightarrow(m1_subset_1\ (k1_tops_1\ X0\ X1)\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \quad (6)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0\ X0)\wedge((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0)))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (k1_zfmisc_1\ (u1_struct_0\ X0))))\Rightarrow((v3_tdlat_2\ X1\ X0)\Rightarrow((v6_tops_1\ (k1_tops_1\ X0\ (k6_setfam_1\ (u1_struct_0\ X0)\ X1))\ X0)\wedge(v6_tops_1\ (k1_tops_1\ X0\ (k2_pre_topc\ X0\ (k5_setfam_1\ (u1_struct_0\ X0)\ X1))\ X0))))))$$