

t67_tdlat_2 (TMYGsRKhtEK- BoNavW14hntnDbGJLzMEDZH5)

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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 $v1_tdlat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ 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 $k6_setfam_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_tops_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
 & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\
 & (u1_struct_0 X0)))) \Rightarrow ((\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\
 & (u1_struct_0 X0))) \Rightarrow ((X2 \in X1) \Rightarrow (r1_tarski (k1_tops_1 X0 (k2_pre_topc \\
 & X0 X2)) X2))) \Rightarrow ((r1_tarski (k1_tops_1 X0 (k2_pre_topc X0 (k6_setfam_1 \\
 & (u1_struct_0 X0) X1))) (k6_setfam_1 (u1_struct_0 X0) X1)) \wedge (k1_tops_1 \\
 & X0 (k2_pre_topc X0 (k1_tops_1 X0 (k6_setfam_1 (u1_struct_0 X0) \\
 & X1))) = k1_tops_1 X0 (k6_setfam_1 (u1_struct_0 X0) X1))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\
 & (u1_struct_0 X0))) \Rightarrow ((v4_tops_1 X1 X0) \Leftrightarrow ((r1_tarski (k1_tops_1 \\
 & X0 (k2_pre_topc X0 X1)) X1) \wedge (r1_tarski X1 (k2_pre_topc X0 (k1_tops_1 \\
 & X0 X1))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
 & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\
 & (u1_struct_0 X0)))) \Rightarrow ((v1_tdlat_2 X1 X0) \Leftrightarrow (\forall X2.(m1_subset_1 \\
 & X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((X2 \in X1) \Rightarrow (v4_tops_1 X2 X0))))))
 \end{aligned} \tag{3}$$

Theorem 1

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