

t42_isomichi
(TMPGtSC9gPfBoCxYjTv5jxnSVZHEapvhYYk)

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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 $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_isomichi : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((v3_isomichi \\ & X1 X0) \Leftrightarrow (r1_tarski (k1_tops_1 X0 (k2_pre_topc X0 X1)) (k2_pre_topc \\ & X0 (k1_tops_1 X0 X1)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (((k1_tops_1 \\ & X0 (k2_pre_topc X0 X1) = k1_tops_1 X0 (k2_pre_topc X0 (k1_tops_1 \\ & X0 X1))) \vee (k2_pre_topc X0 (k1_tops_1 X0 X1) = k2_pre_topc X0 (k1_tops_1 \\ & X0 (k2_pre_topc X0 X1)))) \Rightarrow (v3_isomichi X1 X0))) \end{aligned}$$