

t12_tsep_1
(TMHcGqcyffxza5U7xp39onkn8pMwX4D9TsP)

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Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v1_borsuk_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ 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 $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_pre_topc X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \Rightarrow (\forall X4.(m1_subset_1 X4 (k1_zfmisc_1 \\ & (u1_struct_0 X1)))) \Rightarrow (((v4_pre_topc X2 X0) \wedge (r1_tarski X2 (u1_struct_0 \\ & X1)) \wedge ((r1_tarski X3 X2) \wedge (X3 = X4)))) \Rightarrow ((v4_pre_topc X4 X1) \Leftrightarrow (v4_pre_topc \\ & X3 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \tag{2}$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_pre_topc X1 X0) \Rightarrow (m1_subset_1 (u1_struct_0 X1) (k1_zfmisc_1 (u1_struct_0 X0)))) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_pre_topc X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \Rightarrow ((X2 = u1_struct_0 X1) \Rightarrow (((v1_borsuk_1 X1 X0) \wedge \\ & (m1_pre_topc X1 X0)) \Leftrightarrow (v4_pre_topc X2 X0)))))) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0))\Rightarrow(\forall X1. \\ & ((v1_borsuk_1\ X1\ X0)\wedge(m1_pre_topc\ X1\ X0))\Rightarrow(\forall X2.(m1_subset_1 \\ & \quad X2\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow(\forall X3.(m1_subset_1 \\ & X3\ (k1_zfmisc_1\ (u1_struct_0\ X1)))\Rightarrow((X2 = X3)\Rightarrow((v4_pre_topc\ X3 \\ & \quad X1)\Leftrightarrow(v4_pre_topc\ X2\ X0)))))) \end{aligned}$$