

t33_yellow12 (TMLYG-
mgP7CUVxrU7h6Anv97oRZV33KLDEkU)

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Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v1_tops_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_cantor_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $g1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_cantor_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_cantor_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_cantor_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((v1_tops_2 X1 X0) \Leftrightarrow (r1_tarski X1 (u1_pre_topc X0)))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Rightarrow (\forall X2.\forall X3.(g1_pre_topc X0 X1 = g1_pre_topc X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (2)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (m1_subset_1 (u1_pre_topc X0) (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))) \quad (3)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((v2_cantor_1 X1 X0) \Leftrightarrow (\exists X2. ((v1_tops_2 X2 X0) \wedge ((v1_cantor_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \wedge (r1_tarski X2 (k2_cantor_1 (u1_struct_0 X0) X1)))))) \quad (4)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((v1_cantor_1 X1 X0) \Leftrightarrow (r1_tarski (u1_pre_topc X0) (k1_cantor_1 (u1_struct_0 X0) X1)))) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(l1_pre_topc\ X1) \Rightarrow (\forall X2. \\ & ((v1_tops_2\ X2\ X0) \wedge ((v2_cantor_1\ X2\ X0) \wedge (m1_subset_1\ X2\ (k1_zfmisc_1 \\ & (k1_zfmisc_1\ (u1_struct_0\ X0)))))) \Rightarrow ((g1_pre_topc\ (u1_struct_0 \\ & X0)\ (u1_pre_topc\ X0) = g1_pre_topc\ (u1_struct_0\ X1)\ (u1_pre_topc \\ & X1)) \Rightarrow ((v1_tops_2\ X2\ X1) \wedge ((v2_cantor_1\ X2\ X1) \wedge (m1_subset_1\ X2 \\ & (k1_zfmisc_1\ (k1_zfmisc_1\ (u1_struct_0\ X1)))))))))) \end{aligned}$$