

t2_pcomps_1
(TMaE7WysLmvhHHBieSesf3mP7sTnSGTQnzF)

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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 $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(r1_tarski\ X0\ k1_xboole_0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow (((v4_pre_topc\ X1\ X0) \Rightarrow (k2_pre_topc\ X0\ X1 = X1)) \wedge (((v2_pre_topc\ X0) \wedge (k2_pre_topc\ X0\ X1 = X1)) \Rightarrow (v4_pre_topc\ X1\ X0)))) \quad (2)$$

Assume the following.

$$\forall X0.m1_subset_1\ k1_xboole_0\ (k1_zfmisc_1\ X0) \quad (3)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow (r1_tarski\ X1\ (k2_pre_topc\ X0\ X1))) \quad (4)$$

Assume the following.

$$v1_xboole_0\ k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0.((v2_pre_topc\ X0) \wedge (l1_pre_topc\ X0)) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow ((v1_xboole_0\ X1) \Rightarrow (v4_pre_topc\ X1\ X0))) \quad (6)$$

Theorem 1

$$\forall X0.((v2_pre_topc\ X0) \wedge (l1_pre_topc\ X0)) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow (((\neg(k2_pre_topc\ X0\ X1 \neq k1_xboole_0)) \wedge (X1 = k1_xboole_0)) \wedge (\neg(X1 \neq k1_xboole_0) \wedge (k2_pre_topc\ X0\ X1 = k1_xboole_0))))$$