

t27_topgen_2
(TMZtxsiuFM6fwZYhrvoundgZdPJcErM1LjZ)

October 27, 2020

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 $k5_topgen_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v1_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 (k5_topgen_2 X0 X1)))) \Rightarrow ((v1_finset_1 X2) \Rightarrow (k2_pre_topc (k5_topgen_2 X0 X1) X2 = X2)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k3_subset_1 X0 (k3_subset_1 X0 X1) = X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(v1_pre_topc (k5_topgen_2 X0 X1)) \wedge (l1_pre_topc (k5_topgen_2 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (m1_subset_1 (k3_subset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (4)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k1_tops_1 X0 X1 = k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) X1)))) \quad (5)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 (k5_topgen_2 X0 X1)))) \Rightarrow ((v1_finset_1 (k3_subset_1 (u1_struct_0 (k5_topgen_2 X0 X1) X2)) \Rightarrow (k1_tops_1 (k5_topgen_2 X0 X1) X2 = X2))$$