

t10_topgen_3

(TMN1MP18JiwBYvdFgX6BViA5RxZM8J1zWuY)

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Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\
& ((v2_pre_topc X1) \wedge (l1_pre_topc X1)) \Rightarrow (((u1_struct_0 X0 = u1_struct_0 \\
& X1) \wedge (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X1))) \Rightarrow \\
& ((X2 = X3) \Rightarrow (k2_pre_topc X0 X2 = k2_pre_topc X1 X3)))))) \Rightarrow (u1_pre_topc \\
& X0 = u1_pre_topc X1))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k2_pre_topc \\
& X0 X1 = k3_subset_1 (u1_struct_0 X0) (k1_tops_1 X0 (k3_subset_1 \\
& (u1_struct_0 X0) X1))))
\end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (m1_subset_1 (k3_subset_1 X0 X1) (k1_zfmisc_1 X0)) \tag{3}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\
& ((v2_pre_topc X1) \wedge (l1_pre_topc X1)) \Rightarrow (((u1_struct_0 X0 = u1_struct_0 \\
& X1) \wedge (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X1))) \Rightarrow \\
& ((X2 = X3) \Rightarrow (k1_tops_1 X0 X2 = k1_tops_1 X1 X3)))))) \Rightarrow (u1_pre_topc \\
& X0 = u1_pre_topc X1))
\end{aligned}$$