

t75_tops_3

(TMMHS6vWYbXwjcutXhZarhmN72DC4K4Mgt9)

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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 $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(l1_pre_topc X1) \Rightarrow ((\\ & (u1_struct_0 X0 = u1_struct_0 X1) \wedge (\forall X2.(m1_subset_1 X2 \\ & (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (k1_zfmisc_1 (u1_struct_0 X1)))) \Rightarrow ((X2 = X3) \Rightarrow ((v4_pre_topc X2 X0) \Leftrightarrow \\ & (v4_pre_topc X3 X1)))))) \Rightarrow (g1_pre_topc (u1_struct_0 X0) (u1_pre_topc \\ & X0) = g1_pre_topc (u1_struct_0 X1) (u1_pre_topc X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \Rightarrow (((v4_pre_topc X1 X0) \Rightarrow (k2_pre_topc X0 X1 = \\ & X1)) \wedge (((v2_pre_topc X0) \wedge (k2_pre_topc X0 X1 = X1)) \Rightarrow (v4_pre_topc \\ & X1 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow (v4_pre_topc \\ & (k2_pre_topc X0 X1) X0) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & ((v2_pre_topc X1) \wedge (l1_pre_topc X1)) \Rightarrow (((u1_struct_0 X0 = u1_struct_0 \\ & X1) \wedge (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X1)))) \Rightarrow \\ & ((X2 = X3) \Rightarrow (k2_pre_topc X0 X2 = k2_pre_topc X1 X3)))))) \Rightarrow (g1_pre_topc \\ & (u1_struct_0 X0) (u1_pre_topc X0) = g1_pre_topc (u1_struct_0 X1) \\ & (u1_pre_topc X1)))) \end{aligned}$$