

t73_tops_3

(TMaUg3jKAzpS96MvQsJVcRNUYy393JUPH8q)

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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 $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(l1_pre_topc X1) \Rightarrow ((\\ (u1_struct_0 X0 = u1_struct_0 X1) \wedge (\forall X2.(m1_subset_1 X2 \\ (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ (k1_zfmisc_1 (u1_struct_0 X1))) \Rightarrow ((X2 = X3) \Rightarrow ((v3_pre_topc X2 X0) \Leftrightarrow \\ (v3_pre_topc X3 X1)))))) \Rightarrow (g1_pre_topc (u1_struct_0 X0) (u1_pre_topc \\ X0) = g1_pre_topc (u1_struct_0 X1) (u1_pre_topc X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 X0))) \Rightarrow ((v3_pre_topc X1 X0) \Leftrightarrow (v4_pre_topc (k3_subset_1 \\ (u1_struct_0 X0) X1) X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (m1_subset_1 \\ (k3_subset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (3)$$

Theorem 1

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