

t12_tops_1
(TMSUpFLbSxpk3EH6Bpro8q8HsNqi28vi8ap)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. 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 $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ X0)) \Rightarrow ((X2 \in k2_pre_topc X0 X1) \Leftrightarrow ((\neg v2_struct_0 X0) \wedge (\forall X3. \\ (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\neg (v3_pre_topc \\ X3 X0) \wedge ((X2 \in X3) \wedge (r1_xboole_0 X1 X3)))))))))) \end{aligned} \quad (1)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((X2 \in k2_pre_topc \\ X0 X1) \Leftrightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow (\neg (v3_pre_topc X3 X0) \wedge ((X2 \in X3) \wedge (r1_xboole_0 X1 X3)))))))))) \end{aligned}$$