

t10_tops_2
(TMNFtcBMaKJ8txKQtsqDkJHzFpwV1Rk23rh)

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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 $v1_tops_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_tops_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_setfam_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (k1_zfmisc_1\ (u1_struct_0\ X0)))) \Rightarrow ((v2_tops_2\ X1\ X0) \Leftrightarrow (v1_tops_2 \\ (k7_setfam_1\ (u1_struct_0\ X0)\ X1)\ X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (k1_zfmisc_1 \\ X0))) \Rightarrow (k7_setfam_1\ X0\ (k7_setfam_1\ X0\ X1) = X1) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (k1_zfmisc_1 \\ X0))) \Rightarrow (m1_subset_1\ (k7_setfam_1\ X0\ X1)\ (k1_zfmisc_1\ (k1_zfmisc_1 \\ X0))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (k1_zfmisc_1\ (u1_struct_0\ X0)))) \Rightarrow ((v1_tops_2\ X1\ X0) \Leftrightarrow (v2_tops_2 \\ (k7_setfam_1\ (u1_struct_0\ X0)\ X1)\ X0))) \end{aligned}$$