

t102_tmap_1
(TMG61TNE1tLdYaSYTsmz3NetHaHKRLUUhkq)

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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 $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k8_tmap_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $k5_tmap_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_tmap_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow ((u1_struct_0 (k6_tmap_1 X0 X1) = u1_struct_0 X0) \wedge (u1_pre_topc \\ (k6_tmap_1 X0 X1) = k5_tmap_1 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_pre_topc X1 X0) \Rightarrow (m1_subset_1 (u1_struct_0 X1) (k1_zfmisc_1 (u1_struct_0 X0)))) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge \\ (l1_pre_topc X0))) \wedge (m1_pre_topc X1 X0)) \Rightarrow ((\neg v2_struct_0 (k8_tmap_1 \\ X0 X1)) \wedge ((v1_pre_topc (k8_tmap_1 X0 X1)) \wedge (v2_pre_topc (k8_tmap_1 \\ X0 X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge \\ (l1_pre_topc X0))) \wedge (m1_pre_topc X1 X0)) \Rightarrow ((v1_pre_topc (k8_tmap_1 \\ X0 X1)) \wedge ((v2_pre_topc (k8_tmap_1 X0 X1)) \wedge (l1_pre_topc (k8_tmap_1 \\ X0 X1)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
& X0))) \Rightarrow (\forall X1.(m1_pre_topc X1 X0) \Rightarrow (\forall X2.((v1_pre_topc \\
& X2) \wedge ((v2_pre_topc X2) \wedge (l1_pre_topc X2))) \Rightarrow ((X2 = k8_tmap_1 X0 \\
& X1) \Leftrightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& ((X3 = u1_struct_0 X1) \Rightarrow (X2 = k6_tmap_1 X0 X3)))))) \quad (5)
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
& X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge (m1_pre_topc X1 X0)) \Rightarrow (\\
& (u1_struct_0 (k8_tmap_1 X0 X1) = u1_struct_0 X0) \wedge (\forall X2.(\\
& m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((X2 = u1_struct_0 \\
& X1) \Rightarrow (u1_pre_topc (k8_tmap_1 X0 X1) = k5_tmap_1 X0 X2))))))
\end{aligned}$$