

t14_topalg_5
(TMZRZ8Gz1bvvpfNnBs1qrYTy938KvUXHekgy)

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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 $v1_tsep_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_connsp_2 : \iota \Rightarrow o$ be given. Let $g1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_pre_topc X1) \wedge (l1_pre_topc \\ X1))) \Rightarrow (((g1_pre_topc (u1_struct_0 X0) (u1_pre_topc X0) = g1_pre_topc \\ (u1_struct_0 X1) (u1_pre_topc X1)) \wedge (v1_connsp_2 X0)) \Rightarrow (v1_connsp_2 \\ X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_pre_topc X1 X0) \Rightarrow \\ ((v1_pre_topc (g1_pre_topc (u1_struct_0 X1) (u1_pre_topc X1))) \wedge \\ (m1_pre_topc (g1_pre_topc (u1_struct_0 X1) (u1_pre_topc X1)) \\ X0))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge ((v1_tsep_1 X1 X0) \wedge (m1_pre_topc \\ X1 X0))) \Rightarrow ((v1_connsp_2 X0) \Rightarrow (v1_connsp_2 (g1_pre_topc (u1_struct_0 \\ X1) (u1_pre_topc X1)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_pre_topc X0)) \Rightarrow ((\neg v2_struct_0 \\ (g1_pre_topc (u1_struct_0 X0) (u1_pre_topc X0))) \wedge (v1_pre_topc \\ (g1_pre_topc (u1_struct_0 X0) (u1_pre_topc X0)))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0. ((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow ((v1_pre_topc \\ (g1_pre_topc (u1_struct_0 X0) (u1_pre_topc X0))) \wedge (v2_pre_topc \\ (g1_pre_topc (u1_struct_0 X0) (u1_pre_topc X0)))) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0)\Rightarrow(\forall X1.(m1_pre_topc\ X1\ X0)\Rightarrow(l1_pre_topc\ X1)) \quad (6)$$

Assume the following.

$$\forall X0.((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0))\Rightarrow(\forall X1.(m1_pre_topc\ X1\ X0)\Rightarrow(v2_pre_topc\ X1)) \quad (7)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0)\Rightarrow((v1_pre_topc\ X0)\Rightarrow(X0 = g1_pre_topc\ (u1_struct_0\ X0)\ (u1_pre_topc\ X0))) \quad (8)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0\ X0)\wedge((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0)))\Rightarrow(\forall X1.((\neg v2_struct_0\ X1)\wedge((v1_tsep_1\ X1\ X0)\wedge(m1_pre_topc\ X1\ X0))))\Rightarrow((v1_connsp_2\ X0)\Rightarrow(v1_connsp_2\ X1))$$