

t56_topalg_1 (TMUhxYsd- dzXv2pyiXKAfqBGMZoMhBLnCdON)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $v1_borsuk_2 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_borsuk_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_topalg_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_topalg_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((\neg v2_struct_0 \\ & X0) \wedge ((v2_pre_topc X0) \wedge ((v1_borsuk_2 X0) \wedge (l1_pre_topc X0)))) \wedge \\ & ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge ((m1_subset_1 X2 (u1_struct_0 \\ & X0)) \wedge (m1_borsuk_2 X3 X0 X1 X2)))) \Rightarrow ((v1_funct_1 (k6_topalg_1 X0 \\ & X1 X2 X3)) \wedge ((v2_funct_1 (k6_topalg_1 X0 X1 X2 X3)) \wedge ((v1_funct_2 \\ & (k6_topalg_1 X0 X1 X2 X3) (u1_struct_0 (k5_topalg_1 X0 X2)) (u1_struct_0 \\ & (k5_topalg_1 X0 X1)))) \wedge (v2_funct_2 (k6_topalg_1 X0 X1 X2 X3) (u1_struct_0 \\ & (k5_topalg_1 X0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((\neg v2_struct_0 \\ & X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \wedge ((m1_subset_1 X1 (\\ & u1_struct_0 X0)) \wedge ((m1_subset_1 X2 (u1_struct_0 X0)) \wedge (m1_borsuk_2 \\ & X3 X0 X1 X2)))) \Rightarrow ((v1_funct_1 (k6_topalg_1 X0 X1 X2 X3)) \wedge ((v1_funct_2 \\ & (k6_topalg_1 X0 X1 X2 X3) (u1_struct_0 (k5_topalg_1 X0 X2)) (u1_struct_0 \\ & (k5_topalg_1 X0 X1))) \wedge (m1_subset_1 (k6_topalg_1 X0 X1 X2 X3) (k1_zfmisc_1 \\ & (k2_zfmisc_1 (u1_struct_0 (k5_topalg_1 X0 X2)) (u1_struct_0 (\\ & k5_topalg_1 X0 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))) \Rightarrow (((v1_funct_1 X2) \wedge ((v2_funct_1 X2) \wedge (v2_funct_2 \\ & X2 X1))) \Rightarrow ((v1_funct_1 X2) \wedge (v3_funct_2 X2 X0 X1))) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge ((v1_borsuk_2 \\ & X0) \wedge (l1_pre_topc X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ & (m1_borsuk_2 X3 X0 X1 X2) \Rightarrow (v3_funct_2 (k6_topalg_1 X0 X1 X2 X3) (\\ & u1_struct_0 (k5_topalg_1 X0 X2)) (u1_struct_0 (k5_topalg_1 X0 \\ & X1)))))) \end{aligned}$$