

t41_jordan
(TMQPSzBPxgySPxzgXdgZryaYt6AiVpwtyT7)

October 27, 2020

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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_borsuk_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_struct_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_topmetr : \iota$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $r2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_borsuk_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v5_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & \quad X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & ((v3_funct_1 X2) \wedge (m1_borsuk_2 X2 X0 X1 X1)) \Rightarrow (r2_funct_2 (u1_struct_0 \\ & \quad k5_topmetr) (u1_struct_0 X0) X2 (k6_struct_0 k5_topmetr X0 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((v1_funct_1 X2) \wedge \\ & ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & \quad X0 X1)))))) \wedge ((v1_funct_1 X3) \wedge ((v1_funct_2 X3 X0 X1) \wedge (m1_subset_1 \\ & \quad X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow ((r2_funct_2 X0 X1 X2 \\ & \quad X3) \Leftrightarrow (X2 = X3)) \end{aligned} \quad (2)$$

Assume the following.

$$k5_topmetr = k17_borsuk_1 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge \\ & (l1_pre_topc X0))) \wedge (m1_subset_1 X1 (u1_struct_0 X0))) \Rightarrow (\exists X2. \\ & (m1_borsuk_2 X2 X0 X1 X1) \wedge ((\neg v1_xboole_0 X2) \wedge ((v1_relat_1 X2) \wedge \\ & ((v4_relat_1 X2 (u1_struct_0 k5_topmetr)) \wedge ((v5_relat_1 X2 (u1_struct_0 \\ & X0)) \wedge ((v1_funct_1 X2) \wedge ((v3_funct_1 X2) \wedge ((v1_partfun1 X2 (u1_struct_0 \\ & k5_topmetr)) \wedge (v1_funct_2 X2 (u1_struct_0 k5_topmetr) (u1_struct_0 \\ & X0)))))))))) \end{aligned} \quad (4)$$

Assume the following.

$$(\neg v2_struct_0 k17_borsuk_1) \wedge ((v1_pre_topc k17_borsuk_1) \wedge (v2_pre_topc k17_borsuk_1)) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0)) \wedge ((\neg v2_struct_0 X1) \wedge (l1_pre_topc X1)) \wedge (m1_subset_1 X2 \\ & (u1_struct_0 X1))) \Rightarrow ((v1_funct_1 (k6_struct_0 X0 X1 X2)) \wedge ((v1_funct_2 \\ & (k6_struct_0 X0 X1 X2) (u1_struct_0 X0) (u1_struct_0 X1)) \wedge (v5_pre_topc \\ & (k6_struct_0 X0 X1 X2) X0 X1))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((l1_pre_topc X0) \wedge ((m1_subset_1 \\ & X1 (u1_struct_0 X0)) \wedge (m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (\forall X3. \\ & (m1_borsuk_2 X3 X0 X1 X2) \Rightarrow ((v1_funct_1 X3) \wedge ((v1_funct_2 X3 (u1_struct_0 \\ & k5_topmetr) (u1_struct_0 X0)) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (\\ & k2_zfmisc_1 (u1_struct_0 k5_topmetr) (u1_struct_0 X0))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (l1_struct_0 X0) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((l1_struct_0 X0) \wedge ((\neg v2_struct_0 \\ & X1) \wedge (l1_struct_0 X1)) \wedge (m1_subset_1 X2 (u1_struct_0 X1))) \Rightarrow (\\ & (v1_funct_1 (k6_struct_0 X0 X1 X2)) \wedge ((v1_funct_2 (k6_struct_0 \\ & X0 X1 X2) (u1_struct_0 X0) (u1_struct_0 X1)) \wedge (m1_subset_1 (k6_struct_0 \\ & X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\ & X1)))))) \end{aligned} \quad (9)$$

Assume the following.

$$l1_pre_topc k17_borsuk_1 \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (m1_borsuk_2 \\ & (k6_struct_0 k5_topmetr X0 X1) X0 X1 X1)) \end{aligned}$$