

t46_jordan1k
(TMND6bre2TkQJtpRXayVJ8P5zZYT6LFP8Ld)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_jordan1k : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_topreal6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_jordan1k : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_jordan1k : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. \neg (X0 \in X1) \wedge ((m1_subset_1 X1 (k1_zfmisc_1 X2)) \wedge (v1_xboole_0 X2)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge ((v2_compts_1 X1 (k15_euclid X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))))) \Rightarrow (\forall X2. ((\neg v1_xboole_0 X2) \wedge ((v2_compts_1 X2 (k15_euclid X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))))) \Rightarrow (\exists X3. (m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \wedge (\exists X4. (m1_subset_1 X4 (u1_struct_0 (k15_euclid X0))) \wedge ((X3 \in X1) \wedge ((X4 \in X2) \wedge (k4_jordan1k X0 X1 X2 = k1_topreal6 X0 X3 X4)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_subset_1 X0 k5_numbers) \wedge \\ & (((\neg v1_xboole_0 X1) \wedge ((v2_compts_1 X1 (k15_euclid X0)) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))))) \wedge ((\neg v1_xboole_0 \\ & X2) \wedge ((v2_compts_1 X2 (k15_euclid X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (u1_struct_0 (k15_euclid X0))))))) \Rightarrow (k4_jordan1k X0 X1 X2 = k1_jordan1k \\ & X0 X1 X2) \end{aligned} \quad (5)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7_ordinal1 X0) \Rightarrow ((v2_pre_topc (k15_euclid X0)) \wedge \\ & ((v13_algstr_0 (k15_euclid X0)) \wedge ((v2_rlvect_1 (k15_euclid X0)) \wedge \\ & ((v3_rlvect_1 (k15_euclid X0)) \wedge ((v4_rlvect_1 (k15_euclid X0)) \wedge \\ & ((v5_rlvect_1 (k15_euclid X0)) \wedge ((v6_rlvect_1 (k15_euclid X0)) \wedge \\ & ((v7_rlvect_1 (k15_euclid X0)) \wedge ((v8_rlvect_1 (k15_euclid X0)) \wedge \\ & (v5_rltopsp1 (k15_euclid X0)))))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_tarski X0) \quad (8)$$

Assume the following.

$$\forall X0. v1_finset_1 (k1_tarski X0) \quad (9)$$

Assume the following.

$$\forall X0. (l1_rltopsp1 X0) \Rightarrow ((l1_rlvect_1 X0) \wedge (l1_pre_topc X0)) \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow \\ & (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7_ordinal1 X0) \Rightarrow ((v5_rltopsp1 (k15_euclid X0)) \wedge \\ & (l1_rltopsp1 (k15_euclid X0))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (k5_jordan1k X0 \\ X1 X2 = k1_jordan1k X0 (k6_domain_1 (u1_struct_0 (k15_euclid X0)) \\ X1) X2))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (14)$$

Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((v1_finset_1 \\ X1) \Rightarrow (v2_compts_1 X1 X0))) \end{aligned} \quad (15)$$

Assume the following.

$$\forall X0.(v6_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v7_ordinal1 X1)) \quad (16)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((\neg v1_xboole_0 \\ X1) \wedge ((v2_compts_1 X1 (k15_euclid X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 (k15_euclid X0)))))) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\exists X3.(m1_subset_1 X3 \\ (u1_struct_0 (k15_euclid X0))) \wedge ((X3 \in X1) \wedge (k5_jordan1k X0 X2 X1 = \\ k1_topreal6 X0 X2 X3)))))) \end{aligned}$$