

t45_jordan1k

(TML5di43oPUcDD3MrdrS997sBECswrbQc9F)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ 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 $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_jordan1k : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ 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.

$$\forall X0. \forall X1. \neg (r1_xboole_0 (k1_tarski X0) X1) \wedge (X0 \in X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. ((v2_compts_1 \\ & X1 (k15_euclid X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & (k15_euclid X0)))))) \Rightarrow (\forall X2. ((v2_compts_1 X2 (k15_euclid \\ & X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))))) \Rightarrow \\ & ((\neg r1_xboole_0 X1 X2) \Rightarrow (k1_jordan1k X0 X1 X2 = k6_numbers))) \end{aligned} \quad (3)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0)\Rightarrow & ((v2_pre_topc (k15_euclid X0))\wedge \\ & ((v13_algstr_0 (k15_euclid X0))\wedge((v2_rlvect_1 (k15_euclid X0))\wedge \\ & ((v3_rlvect_1 (k15_euclid X0))\wedge((v4_rlvect_1 (k15_euclid X0))\wedge \\ & ((v5_rlvect_1 (k15_euclid X0))\wedge((v6_rlvect_1 (k15_euclid X0))\wedge \\ & ((v7_rlvect_1 (k15_euclid X0))\wedge((v8_rlvect_1 (k15_euclid X0))\wedge \\ & (v5_rltopsp1 (k15_euclid X0)))))))))) \quad (8) \end{aligned}$$

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.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((v5_rltopsp1 (k15_euclid X0))\wedge (l1_rltopsp1 (k15_euclid X0))) \quad (12)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc X0)\wedge(l1_pre_topc X0))\Rightarrow & (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))\Rightarrow((v1_finset_1 \\ & X1)\Rightarrow(v2_compts_1 X1 X0))) \quad (14) \end{aligned}$$

Assume the following.

$$\forall X0.(v6_membered\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow (v7_ordinal1\ X1)) \quad (15)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1\ X0\ k5_numbers) \Rightarrow (\forall X1.((v2_compts_1 \\ & X1\ (k15_euclid\ X0)) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0 \\ & (k15_euclid\ X0)))))) \Rightarrow (\forall X2.(m1_subset_1\ X2\ (u1_struct_0 \\ & (k15_euclid\ X0))) \Rightarrow ((X2 \in X1) \Rightarrow (k5_jordan1k\ X0\ X2\ X1 = k6_numbers)))) \end{aligned}$$