

t23_jordan5d (TM-
LaLAN4aGLTXN9v5vPPDbxgmAGN9aFigq1)

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Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_seq_4 : \iota \Rightarrow \iota$ be given. Let $k1_pscomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_pscomp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_pscomp_1 : \iota$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 k1_numbers)) \Rightarrow ((X1 = \\
 & ReplSep (toset (\lambda X2 : \iota.m1_subset_1 X2 (u1_struct_0 (k15_euclid \\
 & np_2)))) (\lambda X2 : \iota.X2 \in k3_topreal1 np_2 X0) (\lambda X2 : \iota. \\
 & k17_euclid X2)) \Rightarrow (X1 = k7_relat_1 (k3_pscomp_1 (k15_euclid np_2) \\
 & k4_pscomp_1 (k3_topreal1 np_2 X0) (u1_struct_0 (k1_pre_topc \\
 & (k15_euclid np_2) (k3_topreal1 np_2 X0))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\
 & ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers))
 \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(k7_relset_1 X0 X1 X2 X3 = k7_relat_1 X2 X3) \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((\neg v2_struct_0 (k15_euclid X0))\wedge (v5_rltopsp1 (k15_euclid X0))) \quad (6)$$

Assume the following.

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

Assume the following.

$$\forall X0.(l1_rltopsp1 X0)\Rightarrow((l1_rlvect_1 X0)\wedge(l1_pre_topc X0)) \quad (8)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0)\Rightarrow(l1_struct_0 X0) \quad (9)$$

Assume the following.

$$(v1_funct_1 k4_pscomp_1)\wedge((v1_funct_2 k4_pscomp_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers)\wedge(m1_subset_1 k4_pscomp_1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers)))) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(m1_finseq_1 X1 (u1_struct_0 (k15_euclid X0))))\Rightarrow(m1_subset_1 (k3_topreal1 X0 X1) (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge(l1_pre_topc X0))\wedge(((v1_funct_1 X1)\wedge((v1_funct_2 X1 (u1_struct_0 X0) k1_numbers)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) k1_numbers))))\wedge(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))))))\Rightarrow((v1_funct_1 (k3_pscomp_1 X0 X1 X2))\wedge((v1_funct_2 (k3_pscomp_1 X0 X1 X2) (u1_struct_0 (k1_pre_topc X0 X2)) k1_numbers)\wedge(m1_subset_1 (k3_pscomp_1 X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 (k1_pre_topc X0 X2)) k1_numbers)))))) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((l1_pre_topc\ X0)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))))\Rightarrow((v1_pre_topc\ (k1_pre_topc\ X0\ X1))\wedge(m1_pre_topc\ (k1_pre_topc\ X0\ X1)\ X0)) \quad (13)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow((v5_rltopsp1\ (k15_euclid\ X0))\wedge(l1_rltopsp1\ (k15_euclid\ X0))) \quad (14)$$

Assume the following.

$$\forall X0.(l1_struct_0\ X0)\Rightarrow(\forall X1.((v1_funct_1\ X1)\wedge((v1_funct_2\ X1\ (u1_struct_0\ X0)\ k1_numbers)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ (u1_struct_0\ X0)\ k1_numbers))))))\Rightarrow(k1_pscomp_1\ X0\ X1 = k5_seq_4\ (k7_relset_1\ (u1_struct_0\ X0)\ k1_numbers\ X1\ (u1_struct_0\ X0)))) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1)\Rightarrow(v7_ordinal1\ X0) \quad (16)$$

Theorem 1

$$\forall X0.(m2_finseq_1\ X0\ (u1_struct_0\ (k15_euclid\ np_2)))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ k1_numbers))\Rightarrow((X1 = ReplSep\ (toset\ (\lambda X2 : \iota.m1_subset_1\ X2\ (u1_struct_0\ (k15_euclid\ np_2))))\ (\lambda X2 : \iota.X2 \in k3_topreal1\ np_2\ X0)\ (\lambda X2 : \iota.k17_euclid\ X2))\Rightarrow(k5_seq_4\ X1 = k1_pscomp_1\ (k1_pre_topc\ (k15_euclid\ np_2)\ (k3_topreal1\ np_2\ X0))\ (k3_pscomp_1\ (k15_euclid\ np_2)\ k4_pscomp_1\ (k3_topreal1\ np_2\ X0))))))$$