

t8_jordan1f (TMermLhpNFkYE- bQkz6SVJbLjFoKooJTB5vw)

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Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $v1_sppol_1 : \iota \Rightarrow o$ be given. Let $v2_sppol_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_jordan1e : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k18_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_jordan9 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_finseq_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_finseq_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_finseq_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. Let $k22_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v1_topreal1 : \iota \Rightarrow o$ be given. Let $v2_topreal1 : \iota \Rightarrow o$ be given. Let $v1_goboard5 : \iota \Rightarrow o$ be given. Let $v2_goboard5 : \iota \Rightarrow o$ be given. Let $v1_sprect_2 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\ & (\forall X2. (m2_finseq_1 X2 X0) \Rightarrow ((X1 \in k10_xtuple_0 X2) \Rightarrow (k7_partfun1 \\ & X0 (k1_finseq_6 X0 X2 X1) np_1 = X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\ & (\forall X2. (m2_finseq_1 X2 X0) \Rightarrow (((v1_finseq_6 X2 X0) \wedge (X1 \in k10_xtuple_0 \\ & X2)) \Rightarrow (k10_xtuple_0 (k1_finseq_6 X0 X2 X1) = k10_xtuple_0 X2)))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1_subset_1 X1 (k1_zfmisc_1 X2)) \wedge (v1_xboole_0 X2)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow \\ (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow ((X1 \in k10_xtuple_0 X2) \Rightarrow (k7_partfun1 \\ X0 (k2_finseq_5 X0 X2 X1) (k3_finseq_1 (k2_finseq_5 X0 X2 X1)) = k7_partfun1 \\ X0 X2 (k3_finseq_1 X2)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.((\neg v1_zfmisc_1 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (k22_pscomp_1 (k3_topreal1 np_2 X0) \in k2_relset_1 (u1_struct_0 (k15_euclid np_2)) X0) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v1_zfmisc_1 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (k18_pscomp_1 (k3_topreal1 np_2 X0) \in k2_relset_1 (u1_struct_0 (k15_euclid np_2)) X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (10)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (k2_relset_1 X0 X1 = k10_xtuple_0 X1) \quad (12)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge((m1_subset_1 X1 X0)\wedge((\neg v1_xboole_0 X2)\wedge((v1_finseq_6 X2 X0)\wedge(m1_finseq_1 X2 X0))))))\Rightarrow(v1_finseq_6 (k1_finseq_6 X0 X2 X1) X0) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 X2 X0 X1)\Rightarrow(m1_subset_1 X2 X0)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Rightarrow((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v5_relat_1 X1 X0))\Rightarrow(m1_subset_1 (k2_relset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v1_xboole_0 X0)\wedge((v2_compts_1 X0 (k15_euclid np_2))\wedge((\neg v1_sppol_1 X0)\wedge((\neg v2_sppol_1 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))))))\wedge(v7_ordinal1 X1))\Rightarrow((\neg v1_xboole_0 (k1_jordan9 X0 X1))\wedge((\neg v3_funct_1 (k1_jordan9 X0 X1))\wedge((v1_finseq_6 (k1_jordan9 X0 X1) (u1_struct_0 (k15_euclid np_2))))\wedge((v1_topreal1 (k1_jordan9 X0 X1))\wedge((v2_topreal1 (k1_jordan9 X0 X1))\wedge((v1_goboard5 (k1_jordan9 X0 X1))\wedge((v2_goboard5 (k1_jordan9 X0 X1))\wedge((v1_sprect_2 (k1_jordan9 X0 X1))\wedge(m2_finseq_1 (k1_jordan9 X0 X1) (u1_struct_0 (k15_euclid np_2)))))))))) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge((m1_finseq_1 X1 X0)\wedge(m1_subset_1 X2 X0)))\Rightarrow(m2_finseq_1 (k1_finseq_6 X0 X1 X2) X0) \quad (20)$$

Assume the following.

$$\begin{aligned} \forall X0.((v2_compts_1 X0 (k15_euclid np_2)) \wedge ((\neg v1_sppol_1 \\ X0) \wedge ((\neg v2_sppol_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ (k15_euclid np_2))))))) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (k2_jordan1e \\ X0 X1 = k2_finseq_5 (u1_struct_0 (k15_euclid np_2)) (k1_finseq_6 \\ (u1_struct_0 (k15_euclid np_2)) (k1_jordan9 X0 X1) (k18_pscomp_1 \\ (k3_topreal1 np_2 (k1_jordan9 X0 X1)))) (k22_pscomp_1 (k3_topreal1 \\ np_2 (k1_jordan9 X0 X1)))))) \end{aligned} \quad (21)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ ((v1_finseq_6 X1 X0) \Leftrightarrow (k7_partfun1 X0 X1 np_1 = k7_partfun1 X0 X1 \\ (k3_finseq_1 X1)))) \end{aligned} \quad (22)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ np_2)))) \Rightarrow ((v1_xboole_0 X0) \Rightarrow (v2_sppol_1 X0)) \quad (23)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_zfmisc_1 X0) \wedge ((v1_relat_1 X0) \wedge (v1_funct_1 X0))) \Rightarrow \\ ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_funct_1 X0))) \end{aligned} \quad (24)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ (k2_zfmisc_1 X0 X1))) \Rightarrow ((v4_relat_1 X2 X0) \wedge (v5_relat_1 X2 X1)) \end{aligned} \quad (25)$$

Assume the following.

$$\forall X0.(v6_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow \\ (v7_ordinal1 X1)) \quad (26)$$

Theorem 1

$$\begin{aligned} \forall X0.((v2_compts_1 X0 (k15_euclid np_2)) \wedge ((\neg v1_sppol_1 \\ X0) \wedge ((\neg v2_sppol_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ (k15_euclid np_2))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 k5_numbers) \Rightarrow \\ (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) (k2_jordan1e X0 \\ X1) (k3_finseq_1 (k2_jordan1e X0 X1)) = k18_pscomp_1 (k3_topreal1 \\ np_2 (k1_jordan9 X0 X1)))) \end{aligned}$$