

t112_jordan2c (TMHhww-
BgP6xHQx34aVU3pF2iTEoH6zCu6cq)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_6 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_topreal1 : \iota \Rightarrow o$ 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 $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k20_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k2_goboard9 : \iota \Rightarrow \iota$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_sprect_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_sprect_1 : \iota \Rightarrow o$ be given. Let $k6_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k8_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k7_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_sppol_1 : \iota \Rightarrow o$ be given. Let $v2_sppol_1 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v1_zfmisc_1 : \iota \Rightarrow o$ 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 $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (k15_euclid np_2)) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & (k9_pscomp_1 (k3_topreal1 np_2 (k1_sprect_1 X0)) = k9_pscomp_1 \\ & X0) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((\neg v3_funct_1 X0) \wedge ((v1_finseq_6 \\ & X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 \\ & X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge ((v1_sprect_2 X0) \wedge \\ & (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow (\\ & (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1 = k20_pscomp_1 \\ & (k3_topreal1 np_2 X0)) \Rightarrow (r1_tarski (k2_goboard9 (k1_sprect_1 \\ & (k3_topreal1 np_2 X0))) (k2_goboard9 X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_finseq_6 X0 (u1_struct_0 \\ & (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 X0) \wedge (\\ & (v1_goboard5 X0) \wedge ((v1_sprect_1 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 \\ & (k15_euclid np_2)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & (k15_euclid np_2))) \Rightarrow ((\neg (r1_xxreal_0 (k6_pscomp_1 (k3_topreal1 \\ & np_2 X0)) (k17_euclid X1)) \wedge ((r1_xxreal_0 (k17_euclid X1) (k8_pscomp_1 \\ & (k3_topreal1 np_2 X0))) \wedge ((r1_xxreal_0 (k9_pscomp_1 (k3_topreal1 \\ & np_2 X0)) (k18_euclid X1)) \wedge (r1_xxreal_0 (k18_euclid X1) (k7_pscomp_1 \\ & (k3_topreal1 np_2 X0)))))) \Rightarrow (X1 \in k2_goboard9 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (6)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (8)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (k15_euclid np_2)) \wedge \\ & ((\neg v1_sppol_1 X0) \wedge ((\neg v2_sppol_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 \\ & (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow ((v1_finseq_6 (k1_sprect_1 \\ & X0) (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 (k1_sprect_1 \\ & X0)) \wedge ((v2_topreal1 (k1_sprect_1 X0)) \wedge ((v1_goboard5 (k1_sprect_1 \\ & X0)) \wedge (v2_goboard5 (k1_sprect_1 X0)))))) \end{aligned} \quad (10)$$

Assume the following.

$$v6_membered\ k4_ordinal1 \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0\ X0) \wedge ((v2_compts_1\ X0\ (k15_euclid\ np_2)) \wedge \\ ((\neg v1_sppol_1\ X0) \wedge (m1_subset_1\ X0\ (k1_zfmisc_1\ (u1_struct_0 \\ (k15_euclid\ np_2)))))) \Rightarrow (\neg v3_funct_1\ (k1_sprect_1\ X0)) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0\ X0) \wedge ((\neg v3_funct_1\ X0) \wedge ((v1_finseq_6 \\ X0\ (u1_struct_0\ (k15_euclid\ np_2)) \wedge ((v1_topreal1\ X0) \wedge ((v2_topreal1 \\ X0) \wedge ((v1_goboard5\ X0) \wedge ((v2_goboard5\ X0) \wedge (m1_finseq_1\ X0\ (u1_struct_0 \\ (k15_euclid\ np_2)))))))))) \Rightarrow ((\neg v1_sppol_1\ (k3_topreal1\ np_2 \\ X0)) \wedge (\neg v2_sppol_1\ (k3_topreal1\ np_2\ X0))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.(m1_finseq_1\ X0\ (u1_struct_0\ (k15_euclid\ np_2))) \Rightarrow (v2_compts_1\ (k3_topreal1\ np_2\ X0)\ (k15_euclid\ np_2)) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k5_numbers) \wedge ((\neg v1_zfmisc_1\ X1) \wedge (m1_finseq_1\ X1\ (u1_struct_0\ (k15_euclid\ X0)))) \Rightarrow (\neg v1_xboole_0\ (k3_topreal1\ X0\ X1))) \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0\ X0) \wedge ((\neg v3_funct_1\ X0) \wedge ((v1_finseq_6 \\ X0\ (u1_struct_0\ (k15_euclid\ np_2)) \wedge ((v1_topreal1\ X0) \wedge ((v2_topreal1 \\ X0) \wedge ((v1_goboard5\ X0) \wedge ((v2_goboard5\ X0) \wedge (m1_finseq_1\ X0\ (u1_struct_0 \\ (k15_euclid\ np_2)))))))))) \Rightarrow (\neg v1_xboole_0\ (k2_goboard9\ X0)) \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0\ X0) \wedge ((v2_compts_1\ X0\ (k15_euclid\ np_2)) \wedge \\ ((\neg v1_sppol_1\ X0) \wedge ((\neg v2_sppol_1\ X0) \wedge (m1_subset_1\ X0\ (k1_zfmisc_1 \\ (u1_struct_0\ (k15_euclid\ np_2)))))))) \Rightarrow (v1_sprect_1\ (k1_sprect_1 \\ X0)) \end{aligned} \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1\ X1\ X0) \Rightarrow ((v1_funct_1\ X1) \wedge ((v1_finseq_1\ X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ X0)))))) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge(v1_funct_1 X1)\wedge(v1_finseq_1 X1)) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(m1_finseq_1 X1 (u1_struct_0 (k15_euclid X0))))\Rightarrow(m1_subset_1 (k3_topreal1 X0 X1) (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \quad (20)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))\Rightarrow(m2_finseq_1 (k1_sprect_1 X0) (u1_struct_0 (k15_euclid np_2))) \quad (21)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(\neg v3_funct_1 X0)))\Rightarrow((\neg v1_zfmisc_1 X0)\wedge((v1_relat_1 X0)\wedge(v1_funct_1 X0))) \quad (22)$$

Assume the following.

$$\forall X0.((v1_xboole_0 X0)\wedge((v1_relat_1 X0)\wedge(v1_funct_1 X0)))\Rightarrow((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v3_funct_1 X0))) \quad (23)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v1_funct_1 X0) \quad (24)$$

Assume the following.

$$\forall X0.(v6_membered X0)\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow(v7_ordinal1 X1)) \quad (25)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0)\wedge((\neg v3_funct_1 X0)\wedge((v1_finseq_6 \\ & X0 (u1_struct_0 (k15_euclid np_2))))\wedge((v1_topreal1 X0)\wedge((v2_topreal1 \\ & X0)\wedge((v1_goboard5 X0)\wedge((v2_goboard5 X0)\wedge((v1_sprect_2 X0)\wedge \\ & (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))))))))))\Rightarrow(\\ & \forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2)))\Rightarrow \\ & ((k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1 = k20_pscomp_1 \\ & (k3_topreal1 np_2 X0))\Rightarrow((r1_xxreal_0 (k9_pscomp_1 (k3_topreal1 \\ & np_2 X0)) (k18_euclid X1))\vee(X1 \in k2_goboard9 X0)))) \end{aligned}$$