

t25_jordan1h

(TMMgaoaAfhVL5AkqHiRm5wpYasjc2P9qGJa)

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Let $v3_relat_1 : \iota \Rightarrow o$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $v2_goboard1 : \iota \Rightarrow o$ be given. Let $v3_goboard1 : \iota \Rightarrow o$ be given. Let $v4_goboard1 : \iota \Rightarrow o$ be given. Let $v5_goboard1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_topreal1 : \iota \Rightarrow o$ 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 $r1_goboard1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_gobrd13 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_goboard9 : \iota \Rightarrow \iota$ be given. Let $k3_gobrd13 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_goboard9 : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_xboole_0 X0 X2)) \Rightarrow (r1_tarski X0 (k4_xboole_0 X1 X2)) \quad (1)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v3_relat_1 X0) \wedge ((v1_matrix_1 X0) \wedge ((v2_goboard1 \\
& X0) \wedge ((v3_goboard1 X0) \wedge ((v4_goboard1 X0) \wedge ((v5_goboard1 X0) \wedge \\
& (m2_finseq_1 X0 (k3_finseq_2 (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow \\
& (\forall X1.((\neg v1_xboole_0 X1) \wedge ((\neg v3_funct_1 X1) \wedge ((v1_finseq_6 \\
& X1 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X1) \wedge ((v2_topreal1 \\
& X1) \wedge ((v1_goboard5 X1) \wedge ((v2_goboard5 X1) \wedge (m2_finseq_1 X1 (u1_struct_0 \\
& (k15_euclid np_2)))))))))) \Rightarrow ((r1_goboard1 (u1_struct_0 (k15_euclid \\
& np_2)) X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (((r1_xxreal_0 \\
& np_1 X2) \wedge (r1_xxreal_0 (k2_nat_1 X2 np_1) (k3_finseq_1 X1))) \Rightarrow \\
& ((r1_tarski (k7_subset_1 (u1_struct_0 (k15_euclid np_2)) (k2_gobrd13 \\
& X1 X0 X2) (k3_topreal1 np_2 X1)) (k3_goboard9 X1)) \wedge (r1_tarski \\
& (k7_subset_1 (u1_struct_0 (k15_euclid np_2)) (k3_gobrd13 X1 \\
& X0 X2) (k3_topreal1 np_2 X1) (k2_goboard9 X1))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_tarski X1 X2)) \Rightarrow (r1_tarski X0 X2) \tag{3}$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (r1_tarski (k1_tops_1 X0 X1) X1)) \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. ((\neg v3_relat_1 \\
& X1) \wedge ((v1_matrix_1 X1) \wedge ((v2_goboard1 X1) \wedge ((v3_goboard1 X1) \wedge \\
& ((v4_goboard1 X1) \wedge ((v5_goboard1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 \\
& (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow (\forall X2. (m2_finseq_1 \\
& X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (((r1_goboard1 (u1_struct_0 \\
& (k15_euclid np_2)) X2 X1) \wedge ((v1_topreal1 X2) \wedge ((r1_xxreal_0 np_1 \\
& X0) \wedge (r1_xxreal_0 (k2_nat_1 X0 np_1) (k3_finseq_1 X2)))))) \Rightarrow ((\\
& r1_xboole_0 (k1_tops_1 (k15_euclid np_2) (k3_gobrd13 X2 X1 X0)) \\
& (k3_topreal1 np_2 X2)) \wedge (r1_xboole_0 (k1_tops_1 (k15_euclid \\
& np_2) (k2_gobrd13 X2 X1 X0) (k3_topreal1 np_2 X2))))))
\end{aligned} \tag{5}$$

Assume the following.

$$((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \tag{6}$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \tag{7}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(k7_subset_1 X0 X1 X2 = k4_xboole_0 X1 X2) \quad (9)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (10)$$

Assume the following.

$$\neg v1_finset_1 k4_ordinal1 \quad (11)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (12)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (13)$$

Assume the following.

$$\forall X0.(l1_rltopsp1 X0)\Rightarrow((l1_rlvect_1 X0)\wedge(l1_pre_topc X0)) \quad (14)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (15)$$

Assume the following.

$$\begin{aligned} &\forall X0.\forall X1.\forall X2.((m1_finseq_1 X0 (u1_struct_0 \\ &\quad (k15_euclid np_2)))\wedge(((\neg v3_relat_1 X1)\wedge((v1_matrix_1 X1)\wedge \\ &\quad ((v2_goboard1 X1)\wedge((v3_goboard1 X1)\wedge((v4_goboard1 X1)\wedge((v5_goboard1 \\ &\quad X1)\wedge(m1_finseq_1 X1 (k3_finseq_2 (u1_struct_0 (k15_euclid np_2))))))))))\wedge \\ &\quad (m1_subset_1 X2 k5_numbers)))\Rightarrow(m1_subset_1 (k3_gobrd13 X0 X1 \\ &\quad X2) (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned} &\forall X0.\forall X1.\forall X2.((m1_finseq_1 X0 (u1_struct_0 \\ &\quad (k15_euclid np_2)))\wedge(((\neg v3_relat_1 X1)\wedge((v1_matrix_1 X1)\wedge \\ &\quad ((v2_goboard1 X1)\wedge((v3_goboard1 X1)\wedge((v4_goboard1 X1)\wedge((v5_goboard1 \\ &\quad X1)\wedge(m1_finseq_1 X1 (k3_finseq_2 (u1_struct_0 (k15_euclid np_2))))))))))\wedge \\ &\quad (m1_subset_1 X2 k5_numbers)))\Rightarrow(m1_subset_1 (k2_gobrd13 X0 X1 \\ &\quad X2) (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \end{aligned} \quad (17)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((v5_rltopsp1 (k15_euclid X0)) \wedge (l1_rltopsp1 (k15_euclid X0))) \quad (18)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_finset_1 X0) \quad (19)$$

Assume the following.

$$\forall X0.(v6_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v7_ordinal1 X1)) \quad (20)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v3_relat_1 X0) \wedge ((v1_matrix_1 X0) \wedge ((v2_goboard1 \\ & X0) \wedge ((v3_goboard1 X0) \wedge ((v4_goboard1 X0) \wedge ((v5_goboard1 X0) \wedge \\ & (m2_finseq_1 X0 (k3_finseq_2 (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow \\ & (\forall X1.((\neg v1_xboole_0 X1) \wedge ((\neg v3_funct_1 X1) \wedge ((v1_finseq_6 \\ & X1 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X1) \wedge ((v2_topreal1 \\ & X1) \wedge ((v1_goboard5 X1) \wedge ((v2_goboard5 X1) \wedge (m2_finseq_1 X1 (u1_struct_0 \\ & (k15_euclid np_2)))))))))) \Rightarrow ((r1_goboard1 (u1_struct_0 (k15_euclid \\ & np_2)) X1 X0) \Rightarrow (\forall X2.(m2_subset_1 X2 k1_numbers k5_numbers) \Rightarrow \\ & (((r1_xxreal_0 np_1 X2) \wedge (r1_xxreal_0 (k2_nat_1 X2 np_1) (k3_finseq_1 \\ & X1))) \Rightarrow ((r1_tarski (k1_tops_1 (k15_euclid np_2) (k2_gobrd13 \\ & X1 X0 X2)) (k3_goboard9 X1) \wedge (r1_tarski (k1_tops_1 (k15_euclid \\ & np_2) (k3_gobrd13 X1 X0 X2)) (k2_goboard9 X1)))))) \end{aligned}$$