

t16_jordan1h

(TMT3xdsnnmSB8r5HRLZDA8xPY7tWwTBWQ39)

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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 $v5_goboard1 : \iota \Rightarrow o$ 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 $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $k7_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k4_pscomp_1 : \iota$ be given. Let $k2_jordan1h : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k16_matrix_1 : \iota \Rightarrow \iota$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (1)$$

Assume the following.

$$\forall X0.((v1_matrix_1 X0) \wedge ((v2_goboard1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (r1_xxreal_0 (k5_card_1 (k7_relset_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers k4_pscomp_1 (k2_jordan1h (u1_struct_0 (k15_euclid np_2)) X0))) (k3_finseq_1 X0)) \quad (2)$$

Assume the following.

$$\forall X0.((-v3_relat_1 X0) \wedge ((v1_matrix_1 X0) \wedge ((v5_goboard1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 (u1_struct_0 (k15_euclid np_2))))))) \Rightarrow (r1_xxreal_0 (k3_finseq_1 X0) (k5_card_1 (k7_relset_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers k4_pscomp_1 (k2_jordan1h (u1_struct_0 (k15_euclid np_2)) X0)))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Leftrightarrow(m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(k7_relset_1 X0 X1 X2 X3 = k7_relat_1 X2 X3) \quad (5)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0)\Rightarrow(k5_card_1 X0 = k1_card_1 X0) \quad (6)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finseq_1 X0)))\Rightarrow(k3_finseq_1 X0 = k1_card_1 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_finseq_1 X1 (k3_finseq_2 X0)))\Rightarrow(k2_jordan1h X0 X1 = k16_matrix_1 X1) \quad (8)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0)\Rightarrow((v1_finset_1 (k1_card_1 X0))\wedge(v1_card_1 (k1_card_1 X0))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_finseq_1 X1 (k3_finseq_2 X0)))\Rightarrow(v1_finset_1 (k16_matrix_1 X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xboole_0 X0)\wedge(v1_relat_1 X0))\Rightarrow(v1_xboole_0 (k7_relat_1 X0 X1)) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_relat_1 X0)\wedge(v1_funct_1 X0))\wedge(v1_finset_1 X1))\Rightarrow(v1_finset_1 (k7_relat_1 X0 X1)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1))) \quad (13)$$

Assume the following.

$$(v1_funct_1 k4_pscomp_1)\wedge((v1_funct_2 k4_pscomp_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers)\wedge(m1_subset_1 k4_pscomp_1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers)))) \quad (14)$$

Assume the following.

$$\forall X0.v1_card_1 (k1_card_1 X0) \quad (15)$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v1_finset_1 X0)) \Rightarrow (v7_ordinal1 X0) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.(v1_xboole_0 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_xboole_0 X2)) \quad (17)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xxreal_0 X0) \quad (18)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finset_1 X0))) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (20)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_relat_1 X0) \quad (21)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_finset_1 X0) \quad (22)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (v3_ordinal1 X0) \quad (23)$$

Theorem 1

$$\forall X0.((\neg v3_relat_1 X0) \wedge ((v1_matrix_1 X0) \wedge ((v2_goboard1 X0) \wedge ((v5_goboard1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 (u1_struct_0 (k15_euclid np_2)))))))) \Rightarrow (k3_finseq_1 X0 = k5_card_1 (k7_relset_1 (u1_struct_0 (k15_euclid np_2)) k1_numbers k4_pscomp_1 (k2_jordan1h (u1_struct_0 (k15_euclid np_2)) X0)))$$