

t16_jordan1a (TMWqMzXXKdvzSmhGAz- iMEZhkYBWaHJduhaM)

October 27, 2020

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 $v3_relat_1 : \iota \Rightarrow o$ 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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k3_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ 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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (((k17_euclid X0 = k17_euclid X1) \wedge ((k17_euclid X1 = k17_euclid \\
& X2) \wedge ((r1_xxreal_0 (k18_euclid X0) (k18_euclid X1)) \wedge (r1_xxreal_0 \\
& (k18_euclid X1) (k18_euclid X2)))))) \Rightarrow (X1 \in k1_rltopsp1 (k15_euclid \\
& np_2) X0 X2)))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\
& (v1_xxreal_0 X2) \Rightarrow (((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X2)) \Rightarrow \\
& (r1_xxreal_0 X0 X2))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.((v1_matrix_1 X2) \wedge (m2_finseq_1 X2 \\
& (k3_finseq_2 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (((v2_goboard1 \\
& X2) \wedge ((r1_xxreal_0 np_1 X0) \wedge ((r1_xxreal_0 X0 (k1_matrix_1 X2)) \wedge \\
& ((r1_xxreal_0 np_1 X1) \wedge (r1_xxreal_0 X1 (k3_finseq_1 X2)))))) \Rightarrow \\
& (k17_euclid (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) X2 \\
& X1 X0) = k17_euclid (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) \\
& X2 X1 np_1))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\
& (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (\forall X2.(m2_subset_1 \\
& X2 k1_numbers k5_numbers) \Rightarrow (\forall X3.((\neg v3_relat_1 X3) \wedge ((v1_matrix_1 \\
& X3) \wedge ((v2_goboard1 X3) \wedge ((v3_goboard1 X3) \wedge ((v4_goboard1 X3) \wedge \\
& ((v5_goboard1 X3) \wedge (m2_finseq_1 X3 (k3_finseq_2 (u1_struct_0 \\
& (k15_euclid np_2)))))))))) \Rightarrow (((r1_xxreal_0 np_1 X0) \wedge ((r1_xxreal_0 \\
& X0 X1) \wedge ((r1_xxreal_0 X1 (k1_matrix_1 X3)) \wedge ((r1_xxreal_0 np_1 \\
& X2) \wedge (r1_xxreal_0 X2 (k3_finseq_1 X3)))))) \Rightarrow (r1_xxreal_0 (k18_euclid \\
& (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) X3 X2 X0) (k18_euclid \\
& (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) X3 X2 X1))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\
& ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers))
\end{aligned} \tag{5}$$

Assume the following.

$$r1_xxreal_0 np_1 np_1 \tag{6}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (r1_xxreal_0 X0 X0) \tag{7}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\
& X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1))
\end{aligned} \tag{8}$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{9}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{10}$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (11)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (12)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge (v1_funct_1 X1) \wedge (v1_finseq_1 X1)) \quad (14)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (((v1_matrix_1 X1) \wedge (m1_finseq_1 X1 (k3_finseq_2 X0))) \wedge ((v7_ordinal1 X2) \wedge (v7_ordinal1 X3))) \Rightarrow (m1_subset_1 (k3_matrix_1 X0 X1 X2 X3) X0) \quad (16)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v1_finseq_1 X0) \wedge (v1_matrix_1 X0)))) \Rightarrow (m1_subset_1 (k1_matrix_1 X0) k5_numbers) \quad (17)$$

Assume the following.

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

Assume the following.

$$\forall X0. (v6_membered X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow (v7_ordinal1 X1)) \quad (19)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (\forall X2. ((\neg v3_relat_1 X2) \wedge ((v1_matrix_1 X2) \wedge ((v2_goboard1 X2) \wedge ((v3_goboard1 X2) \wedge \\ & ((v4_goboard1 X2) \wedge ((v5_goboard1 X2) \wedge (m2_finseq_1 X2 (k3_finseq_2 \\ & (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow (((r1_xxreal_0 np_1 \\ & X0) \wedge ((r1_xxreal_0 X0 (k3_finseq_1 X2)) \wedge ((r1_xxreal_0 np_1 X1) \wedge \\ & (r1_xxreal_0 X1 (k1_matrix_1 X2)))))) \Rightarrow (k3_matrix_1 (u1_struct_0 \\ & (k15_euclid np_2)) X2 X0 X1 \in k1_rltopsp1 (k15_euclid np_2) (k3_matrix_1 \\ & (u1_struct_0 (k15_euclid np_2)) X2 X0 np_1) (k3_matrix_1 (u1_struct_0 \\ & (k15_euclid np_2)) X2 X0 (k1_matrix_1 X2)))))) \end{aligned}$$