

t61_jordan1j (TMG-
pjn45SpUFFMTKqmnZaCCWKMDNHu7KcyL)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_topreal2 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ 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 $k1_jordan8 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_jordan6 : \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_jordan9 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k9_jordan6 : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_jordan1e : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_jordan1e : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_connsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_sppol_1 : \iota \Rightarrow o$ be given. Let $v2_sppol_1 :$

$\iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((v1_topreal2 \\
& X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3.(m1_subset_1 \\
& X3 k5_numbers) \Rightarrow (\forall X4.(m1_subset_1 X4 k5_numbers) \Rightarrow (\neg(\neg \\
& r1_xxreal_0 X2 np_1) \wedge ((\neg r1_xxreal_0 (k3_finseq_1 (k1_jordan8 \\
& X1 X0)) X2) \wedge ((r1_xxreal_0 np_1 X3) \wedge ((r1_xxreal_0 X3 X4) \wedge ((r1_xxreal_0 \\
& X4 (k1_matrix_1 (k1_jordan8 X1 X0))) \wedge ((k9_subset_1 (u1_struct_0 \\
& (k15_euclid np_2)) (k1_rltopsp1 (k15_euclid np_2)) (k3_matrix_1 \\
& (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 X0) X2 X3) (k3_matrix_1 \\
& (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 X0) X2 X4) (k3_topreal1 \\
& np_2 (k1_jordan1e X1 X0)) = k1_tarski (k3_matrix_1 (u1_struct_0 \\
& (k15_euclid np_2)) (k1_jordan8 X1 X0) X2 X4) \wedge ((k9_subset_1 (\\
& u1_struct_0 (k15_euclid np_2)) (k1_rltopsp1 (k15_euclid np_2)) \\
& (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 \\
& X0) X2 X3) (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 \\
& X1 X0) X2 X4) (k3_topreal1 np_2 (k2_jordan1e X1 X0)) = k1_tarski \\
& (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 \\
& X0) X2 X3) \wedge (r1_xboole_0 (k1_rltopsp1 (k15_euclid np_2)) (k3_matrix_1 \\
& (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 X0) X2 X3) (k3_matrix_1 \\
& (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 X0) X2 X4) (k8_jordan6 \\
& X1)))))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v2_connsp_1 X0 (k15_euclid np_2)) \wedge ((v2_compts_1 \\
& X0 (k15_euclid np_2)) \wedge ((\neg v1_sppol_1 X0) \wedge ((\neg v2_sppol_1 X0) \wedge \\
& (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))))))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 k5_numbers) \Rightarrow ((\neg r1_xxreal_0 X1 k6_numbers) \Rightarrow \\
& (k3_topreal1 np_2 (k2_jordan1e X0 X1) = k9_jordan6 (k3_topreal1 \\
& np_2 (k1_jordan9 X0 X1))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v2_connsp_1 X0 (k15_euclid np_2)) \wedge ((v2_compts_1 \\
& X0 (k15_euclid np_2)) \wedge ((\neg v1_sppol_1 X0) \wedge ((\neg v2_sppol_1 X0) \wedge \\
& (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))))))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 k5_numbers) \Rightarrow ((\neg r1_xxreal_0 X1 k6_numbers) \Rightarrow \\
& (k3_topreal1 np_2 (k1_jordan1e X0 X1) = k8_jordan6 (k3_topreal1 \\
& np_2 (k1_jordan9 X0 X1))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow (v2_connsp_1 X0 (k15_euclid np_2))) \tag{4}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow ((v1_topreal2 X0) \wedge ((\neg v1_sppol_1 X0) \wedge (\neg v2_sppol_1 X0)))) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow ((\neg v1_xboole_0 X0) \wedge (v2_compts_1 X0 (k15_euclid np_2)))) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((v1_topreal2 \\ & X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3.(m1_subset_1 \\ & X3 k5_numbers) \Rightarrow (\forall X4.(m1_subset_1 X4 k5_numbers) \Rightarrow (\neg(\neg \\ & r1_xxreal_0 X2 np_1) \wedge ((\neg r1_xxreal_0 (k3_finseq_1 (k1_jordan8 \\ & X1 X0)) X2) \wedge ((r1_xxreal_0 np_1 X3) \wedge ((r1_xxreal_0 X3 X4) \wedge ((r1_xxreal_0 \\ & X4 (k1_matrix_1 (k1_jordan8 X1 X0))) \wedge ((\neg r1_xxreal_0 X0 k6_numbers) \wedge \\ & ((k9_subset_1 (u1_struct_0 (k15_euclid np_2)) (k1_rltopsp1 \\ & (k15_euclid np_2) (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) \\ & (k1_jordan8 X1 X0) X2 X3) (k3_matrix_1 (u1_struct_0 (k15_euclid \\ & np_2)) (k1_jordan8 X1 X0) X2 X4)) (k8_jordan6 (k3_topreal1 np_2 \\ & (k1_jordan9 X1 X0))) = k1_tarski (k3_matrix_1 (u1_struct_0 (k15_euclid \\ & np_2)) (k1_jordan8 X1 X0) X2 X4)) \wedge ((k9_subset_1 (u1_struct_0 \\ & (k15_euclid np_2)) (k1_rltopsp1 (k15_euclid np_2) (k3_matrix_1 \\ & (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 X0) X2 X3) (k3_matrix_1 \\ & (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 X0) X2 X4)) (k9_jordan6 \\ & (k3_topreal1 np_2 (k1_jordan9 X1 X0))) = k1_tarski (k3_matrix_1 \\ & (u1_struct_0 (k15_euclid np_2)) (k1_jordan8 X1 X0) X2 X3)) \wedge (r1_xboole_0 \\ & (k1_rltopsp1 (k15_euclid np_2) (k3_matrix_1 (u1_struct_0 (k15_euclid \\ & np_2)) (k1_jordan8 X1 X0) X2 X3) (k3_matrix_1 (u1_struct_0 (k15_euclid \\ & np_2)) (k1_jordan8 X1 X0) X2 X4)) (k8_jordan6 X1)))))))))) \end{aligned}$$