

t50_jordan6 (TMHE- QNzHbFD7oJaZmWhRM1hLwsiTsbSwbJ1)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_topreal2 : \iota \Rightarrow o$ be given. Let $r1_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k22_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k8_jordan6 : \iota \Rightarrow \iota$ be given. Let $k9_jordan6 : \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k1_jordan5c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_jordan6 : \iota \Rightarrow \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k8_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k2_jordan5c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X3.(\\ & m1_subset_1 X3 (u1_struct_0 (k15_euclid X0)))) \Rightarrow ((r1_topreal1 \\ & (k15_euclid X0) X2 X3 X1) \Rightarrow (r1_topreal1 (k15_euclid X0) X3 X2 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow ((\neg v1_xboole_0 (k9_jordan6 X0)) \wedge (m1_subset_1 (k9_jordan6 \\ & X0) (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((\neg v1_xboole_0 (k8_jordan6 X0)) \wedge (m1_subset_1 (k8_jordan6 X0) (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))) \quad (4)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k22_pscomp_1 X0) (u1_struct_0 (k15_euclid np_2))) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k18_pscomp_1 X0) (u1_struct_0 (k15_euclid np_2))) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))) \Rightarrow \\ & ((X1 = k9_jordan6 X0) \Leftrightarrow ((r1_topreal1 (k15_euclid np_2) (k22_pscomp_1 X0) (k18_pscomp_1 X0) X1) \wedge ((k9_subset_1 (u1_struct_0 (k15_euclid np_2)) (k8_jordan6 X0) X1 = k2_tarski (k18_pscomp_1 X0) (k22_pscomp_1 X0)) \wedge ((k4_subset_1 (u1_struct_0 (k15_euclid np_2)) (k8_jordan6 X0) X1 = X0) \wedge (\neg r1_xxreal_0 (k18_euclid (k1_jordan5c (k8_jordan6 X0) (k6_jordan6 (k10_real_1 (k7_real_1 (k6_pscomp_1 X0) (k8_pscomp_1 X0)) np_2)) (k18_pscomp_1 X0) (k22_pscomp_1 X0))) (k18_euclid (k2_jordan5c X1 (k6_jordan6 (k10_real_1 (k7_real_1 (k6_pscomp_1 X0) (k8_pscomp_1 X0) (k8_pscomp_1 X0)) np_2)) (k22_pscomp_1 X0) (k18_pscomp_1 X0)))))))))) \quad (7) \end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\
& \quad np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\
& \quad (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\
& ((X1 = k8_jordan6 X0) \Leftrightarrow ((r1_topreal1 (k15_euclid np_2) (k18_pscomp_1 \\
& \quad X0) (k22_pscomp_1 X0) X1) \wedge (\exists X2.((\neg v1_xboole_0 X2) \wedge (m1_subset_1 \\
& \quad X2 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \wedge ((r1_topreal1 \\
& \quad (k15_euclid np_2) (k22_pscomp_1 X0) (k18_pscomp_1 X0) X2) \wedge ((\\
& \quad k9_subset_1 (u1_struct_0 (k15_euclid np_2)) X1 X2 = k2_tarski \\
& \quad (k18_pscomp_1 X0) (k22_pscomp_1 X0)) \wedge ((k4_subset_1 (u1_struct_0 \\
& \quad (k15_euclid np_2)) X1 X2 = X0) \wedge (\neg r1_xxreal_0 (k18_euclid (k1_jordan5c \\
& \quad X1 (k6_jordan6 (k10_real_1 (k7_real_1 (k6_pscomp_1 X0) (k8_pscomp_1 \\
& \quad X0)) np_2)) (k18_pscomp_1 X0) (k22_pscomp_1 X0))) (k18_euclid \\
& \quad (k2_jordan5c X2 (k6_jordan6 (k10_real_1 (k7_real_1 (k6_pscomp_1 \\
& \quad X0) (k8_pscomp_1 X0)) np_2)) (k22_pscomp_1 X0) (k18_pscomp_1 \\
& \quad X0)))))))))))))
\end{aligned} \tag{8}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\
& \quad np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow ((r1_topreal1 (k15_euclid np_2) \\
& \quad (k18_pscomp_1 X0) (k22_pscomp_1 X0) (k8_jordan6 X0)) \wedge ((r1_topreal1 \\
& \quad (k15_euclid np_2) (k22_pscomp_1 X0) (k18_pscomp_1 X0) (k8_jordan6 \\
& \quad X0)) \wedge ((r1_topreal1 (k15_euclid np_2) (k22_pscomp_1 X0) (k18_pscomp_1 \\
& \quad X0) (k9_jordan6 X0)) \wedge ((r1_topreal1 (k15_euclid np_2) (k18_pscomp_1 \\
& \quad X0) (k22_pscomp_1 X0) (k9_jordan6 X0)) \wedge ((k9_subset_1 (u1_struct_0 \\
& \quad (k15_euclid np_2)) (k8_jordan6 X0) (k9_jordan6 X0) = k2_tarski \\
& \quad (k18_pscomp_1 X0) (k22_pscomp_1 X0)) \wedge ((k4_subset_1 (u1_struct_0 \\
& \quad (k15_euclid np_2)) (k8_jordan6 X0) (k9_jordan6 X0) = X0) \wedge (\neg r1_xxreal_0 \\
& \quad (k18_euclid (k1_jordan5c (k8_jordan6 X0) (k6_jordan6 (k10_real_1 \\
& \quad (k7_real_1 (k6_pscomp_1 X0) (k8_pscomp_1 X0)) np_2)) (k18_pscomp_1 \\
& \quad X0) (k22_pscomp_1 X0))) (k18_euclid (k2_jordan5c (k9_jordan6 \\
& \quad X0) (k6_jordan6 (k10_real_1 (k7_real_1 (k6_pscomp_1 X0) (k8_pscomp_1 \\
& \quad X0)) np_2)) (k22_pscomp_1 X0) (k18_pscomp_1 X0)))))))))))))
\end{aligned}$$