

t56_jordan6

(TMZhMHuT2wbShKsEdCPTP1iRPgKLLKX1TwW)

October 27, 2020

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 $r1_jordan6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_jordan5c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ 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 $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & \quad np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ & \quad np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid \\ & \quad np_2))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 (k15_euclid \\ & \quad np_2)))) \Rightarrow ((X3 \in X0) \Rightarrow (r1_jordan5c X0 X1 X2 X3 X3)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\
& \quad np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow ((r1_topreal1 (k15_euclid np_2) \\
& (k18_pscomp_1 X0) (k22_pscomp_1 X0) (k8_jordan6 X0)) \wedge ((r1_topreal1 \\
& (k15_euclid np_2) (k22_pscomp_1 X0) (k18_pscomp_1 X0) (k8_jordan6 \\
& X0)) \wedge ((r1_topreal1 (k15_euclid np_2) (k22_pscomp_1 X0) (k18_pscomp_1 \\
& X0) (k9_jordan6 X0)) \wedge ((r1_topreal1 (k15_euclid np_2) (k18_pscomp_1 \\
& X0) (k22_pscomp_1 X0) (k9_jordan6 X0)) \wedge ((k9_subset_1 (u1_struct_0 \\
& (k15_euclid np_2)) (k8_jordan6 X0) (k9_jordan6 X0) = k2_tarski \\
& (k18_pscomp_1 X0) (k22_pscomp_1 X0)) \wedge ((k4_subset_1 (u1_struct_0 \\
& (k15_euclid np_2)) (k8_jordan6 X0) (k9_jordan6 X0) = X0) \wedge (\neg r1_xxreal_0 \\
& (k18_euclid (k1_jordan5c (k8_jordan6 X0) (k6_jordan6 (k10_real_1 \\
& (k7_real_1 (k6_pscomp_1 X0) (k8_pscomp_1 X0)) np_2)) (k18_pscomp_1 \\
& X0) (k22_pscomp_1 X0))) (k18_euclid (k2_jordan5c (k9_jordan6 \\
& X0) (k6_jordan6 (k10_real_1 (k7_real_1 (k6_pscomp_1 X0) (k8_pscomp_1 \\
& X0)) np_2)) (k22_pscomp_1 X0) (k18_pscomp_1 X0)))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow ((r1_topreal1 X0 X2 X3 X1) \Rightarrow ((X2 \in X1) \wedge (X3 \in X1))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\
& ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers))
\end{aligned} \tag{5}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 \\
& X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \Rightarrow (k4_subset_1 X0 X1 X2 = \\
& k2_xboole_0 X1 X2)
\end{aligned} \tag{7}$$

Assume the following.

$$v6_membered k4_ordinal1 \tag{8}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow & ((v2_pre_topc\ (k15_euclid\ X0)) \wedge \\ & ((v13_algstr_0\ (k15_euclid\ X0)) \wedge ((v2_rlvect_1\ (k15_euclid\ X0)) \wedge \\ & ((v3_rlvect_1\ (k15_euclid\ X0)) \wedge ((v4_rlvect_1\ (k15_euclid\ X0)) \wedge \\ & ((v5_rlvect_1\ (k15_euclid\ X0)) \wedge ((v6_rlvect_1\ (k15_euclid\ X0)) \wedge \\ & ((v7_rlvect_1\ (k15_euclid\ X0)) \wedge ((v8_rlvect_1\ (k15_euclid\ X0)) \wedge \\ & (v5_rltopsp1\ (k15_euclid\ X0)))))))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(l1_rltopsp1\ X0) \Rightarrow ((l1_rlvect_1\ X0) \wedge (l1_pre_topc\ X0)) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid \\ np_2)))) \Rightarrow & ((\neg v1_xboole_0\ (k9_jordan6\ X0)) \wedge (m1_subset_1\ (k9_jordan6 \\ X0)\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ np_2)))))) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid \\ np_2)))) \Rightarrow & ((\neg v1_xboole_0\ (k8_jordan6\ X0)) \wedge (m1_subset_1\ (k8_jordan6 \\ X0)\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ np_2)))))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid \\ np_2)))) \Rightarrow & (m1_subset_1\ (k22_pscomp_1\ X0)\ (u1_struct_0\ (k15_euclid \\ np_2))) \end{aligned} \quad (13)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid \\ np_2)))) \Rightarrow & (m1_subset_1\ (k18_pscomp_1\ X0)\ (u1_struct_0\ (k15_euclid \\ np_2))) \end{aligned} \quad (14)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow ((v5_rltopsp1\ (k15_euclid\ X0)) \wedge (l1_rltopsp1\ (k15_euclid\ X0))) \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(X2 = k2_xboole_0\ X0\ X1) \Leftrightarrow & (\forall X3. \\ (X3 \in X2) \Leftrightarrow & ((X3 \in X0) \vee (X3 \in X1))) \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\
& \quad np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\
& \quad np_2)))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid \\
& \quad np_2)))) \Rightarrow ((r1_jordan6 X0 X1 X2) \Leftrightarrow (\neg(\neg(X1 \in k8_jordan6 X0) \wedge ((X2 \in \\
& \quad k9_jordan6 X0) \wedge (X2 \neq k18_pscomp_1 X0))) \wedge (\neg(X1 \in k8_jordan6 X0) \wedge \\
& \quad ((X2 \in k8_jordan6 X0) \wedge (r1_jordan5c (k8_jordan6 X0) (k18_pscomp_1 \\
& \quad X0) (k22_pscomp_1 X0) X1 X2)))) \wedge (\neg(X1 \in k9_jordan6 X0) \wedge ((X2 \in k9_jordan6 \\
& \quad X0) \wedge ((X2 \neq k18_pscomp_1 X0) \wedge (r1_jordan5c (k9_jordan6 X0) (k22_pscomp_1 \\
& \quad X0) (k18_pscomp_1 X0) X1 X2)))))))))
\end{aligned} \tag{17}$$

Assume the following.

$$\forall X0.(v6_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v7_ordinal1 X1)) \tag{18}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\
& \quad np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\
& \quad np_2)))) \Rightarrow (((v1_topreal2 X0) \wedge (X1 \in X0)) \Rightarrow (r1_jordan6 X0 X1 X1))
\end{aligned}$$