

t12_jordan16

(TMQb6RtqXjWnVR2L1jJkMgzDmXwokKqf2tL)

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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 $r1_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k5_numbers : \iota$ 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 $k4_ordinal1 : \iota$ 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. Assume the following.

$$\begin{aligned}
 \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow & (\forall X1.(m1_subset_1 \\
 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0))) \Rightarrow & (\forall X2. \\
 (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow & (\forall X3.(\\
 m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow & (\neg(r1_topreal1 \\
 (k15_euclid X0) X2 X3 X1) \wedge (\forall X4.(m1_subset_1 X4 (u1_struct_0 & \\
 (k15_euclid X0))) \Rightarrow (\neg(X4 \in X1) \wedge ((X4 \neq X2) \wedge (X4 \neq X3)))))) & (1)
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
 \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow & (\forall X1.(m1_subset_1 \\
 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0))) \Rightarrow & (\forall X2. \\
 (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow & (\forall X3.(\\
 m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow & (\neg(r1_topreal1 \\
 (k15_euclid X0) X2 X3 X1) \wedge (X2 = X3)))) & (2)
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
 \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow & (\forall X1. \\
 (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow & (\forall X2. \\
 (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow & (\forall X3.(m1_subset_1 X3 \\
 (u1_struct_0 X0)) \Rightarrow ((r1_topreal1 X0 X2 X3 X1) \Rightarrow & ((X2 \in X1) \wedge (X3 \in X1)))))) & (3)
 \end{aligned}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_2) \wedge (m2_subset_1 \ np_2 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_2 \ k5_numbers) \wedge (m1_subset_1 \ np_2 \ k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ X0)) \Rightarrow (k9_subset_1 \ X0 \ X1 \ X1 = X1) \quad (6)$$

Assume the following.

$$v6_membered \ k4_ordinal1 \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7_ordinal1 \ X0) \Rightarrow ((v2_pre_topc \ (k15_euclid \ X0)) \wedge \\ & ((v13_algstr_0 \ (k15_euclid \ X0)) \wedge ((v2_rlvect_1 \ (k15_euclid \ X0)) \wedge \\ & ((v3_rlvect_1 \ (k15_euclid \ X0)) \wedge ((v4_rlvect_1 \ (k15_euclid \ X0)) \wedge \\ & ((v5_rlvect_1 \ (k15_euclid \ X0)) \wedge ((v6_rlvect_1 \ (k15_euclid \ X0)) \wedge \\ & ((v7_rlvect_1 \ (k15_euclid \ X0)) \wedge ((v8_rlvect_1 \ (k15_euclid \ X0)) \wedge \\ & (v5_rltopsp1 \ (k15_euclid \ X0)))))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0. (l1_rltopsp1 \ X0) \Rightarrow ((l1_rlvect_1 \ X0) \wedge (l1_pre_topc \ X0)) \quad (9)$$

Assume the following.

$$\forall X0. (v7_ordinal1 \ X0) \Rightarrow ((v5_rltopsp1 \ (k15_euclid \ X0)) \wedge (l1_rltopsp1 \ (k15_euclid \ X0))) \quad (10)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_tarski \ X0 \ X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (11)$$

Assume the following.

$$\forall X0. (v6_membered \ X0) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ X0) \Rightarrow (v7_ordinal1 \ X1)) \quad (12)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_subset_1 \ X0 \ (k1_zfmisc_1 \ (u1_struct_0 \ (k15_euclid \ np_2)))) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (u1_struct_0 \ (k15_euclid \ np_2)))) \Rightarrow (\forall X2. (m1_subset_1 \ X2 \ (u1_struct_0 \ (k15_euclid \ np_2)))) \Rightarrow (\forall X3. (m1_subset_1 \ X3 \ (u1_struct_0 \ (k15_euclid \ np_2)))) \Rightarrow (\forall X4. (m1_subset_1 \ X4 \ (u1_struct_0 \ (k15_euclid \ np_2)))) \Rightarrow (\forall X5. (m1_subset_1 \ X5 \ (u1_struct_0 \ (k15_euclid \ np_2)))) \Rightarrow (\neg (r1_topreal1 \ (k15_euclid \ np_2) \ X2 \ X3 \ X0) \wedge ((k9_subset_1 \ (u1_struct_0 \ (k15_euclid \ np_2)) \ X0 \ X1 = k2_tarski \ X4 \ X5) \wedge (X0 = X1)))))) \end{aligned}$$