

t14_jordan1e

(TMZk6MxFnuJ9zpFvGy7KMdVoNr3b71QFxb5)

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Let $v1_topreal2 : \iota \Rightarrow o$ be given. 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 $k18_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k23_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k6_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k9_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k16_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k14_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k1_pscomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_pscomp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_pscomp_1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow ((k19_euclid X0 \\ & X1 = k19_euclid X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (k15_euclid np_2)) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & (\neg (v1_topreal2 X0) \wedge (r1_xxreal_0 (k8_pscomp_1 X0) (k6_pscomp_1 \\ & X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (r1_xxreal_0 X0 X0) \quad (3)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k9_pscomp_1 X0) k1_numbers) \quad (4)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k8_pscomp_1 X0) k1_numbers) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k6_pscomp_1 X0) k1_numbers) \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k16_pscomp_1 X0) (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k14_pscomp_1 X0) (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (k23_pscomp_1 X0 = k19_euclid (k8_pscomp_1 X0) (k1_pscomp_1 (k1_pre_topc (k15_euclid np_2) (k16_pscomp_1 X0)) (k3_pscomp_1 (k15_euclid np_2) k5_pscomp_1 (k16_pscomp_1 X0)))) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (k18_pscomp_1 X0 = k19_euclid (k6_pscomp_1 X0) (k1_pscomp_1 (k1_pre_topc (k15_euclid np_2) (k14_pscomp_1 X0)) (k3_pscomp_1 (k15_euclid np_2) k5_pscomp_1 (k14_pscomp_1 X0)))) \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (k9_pscomp_1 X0 = k1_pscomp_1 (k1_pre_topc (k15_euclid np_2) X0) (k3_pscomp_1 (k15_euclid np_2) k5_pscomp_1 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (12)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow ((\neg v1_xboole_0 X0) \wedge (v2_compts_1 X0 (k15_euclid np_2)))) \quad (14)$$

Theorem 1

$$\forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (k18_pscomp_1 X0 \neq k23_pscomp_1 X0)$$