

t124_jordan2c
(TMcWPcHXLszfHnWjsKLeXLg88cciFy4C3uE)

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Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ 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 $r3_connsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v9_rltopsp1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow \\ & (((r1_xxreal_0 np_2 X0) \wedge (v9_rltopsp1 X1 (k15_euclid X0))) \Rightarrow (\\ & \quad r2_jordan2c X0 X1 (k2_jordan2c X0 X1)))) \end{aligned} \quad (1)$$

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.

$$r1_xxreal_0 np_2 np_2 \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v7_ordinal1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 (k15_euclid X0)))))) \Rightarrow (m1_subset_1 (k2_jordan2c \\ & \quad X0 X1) (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (u1_struct_0\ (k15_euclid\ X0)))) \Rightarrow (\forall X2.(m1_subset_1\ X2 \\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ X0)))) \Rightarrow ((r2_jordan2c \\ X0\ X1\ X2) \Leftrightarrow ((r3_connsp_1\ (k15_euclid\ X0)\ (k3_subset_1\ (u1_struct_0 \\ (k15_euclid\ X0))\ X1)\ X2) \wedge (\neg v9_rltopsp1\ X2\ (k15_euclid\ X0)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ X0)))) \Rightarrow ((v2_compts_1 \\ X1\ (k15_euclid\ X0)) \Rightarrow (v9_rltopsp1\ X1\ (k15_euclid\ X0)))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.(v6_membered\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow \\ (v7_ordinal1\ X1)) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} \forall X0.((v2_compts_1\ X0\ (k15_euclid\ np_2)) \wedge (m1_subset_1 \\ X0\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ np_2)))) \Rightarrow (r3_connsp_1 \\ (k15_euclid\ np_2)\ (k3_subset_1\ (u1_struct_0\ (k15_euclid\ np_2)) \\ X0)\ (k2_jordan2c\ np_2\ X0)) \end{aligned}$$