

t117_jordan2c (TMRqATuXi-
Axk3hXSy1eS71A9LmfgCnxMTAc)

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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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $r3_connsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ (u1_struct_0 X0))) \Rightarrow ((r3_connsp_1 X0 X2 X1) \Rightarrow (r1_tarski X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow ((r1_xboole_0 X1 X2) \Leftrightarrow (r1_tarski \\ X1 (k3_subset_1 X0 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(r1_xboole_0 X0 X1) \Rightarrow (r1_xboole_0 X1 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$(\neg v1_xboole_0\ k4_ordinal1) \wedge (v3_ordinal1\ k4_ordinal1) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0\ k1_numbers \quad (7)$$

Assume the following.

$$\forall X0. (l1_rltopsp1\ X0) \Rightarrow ((l1_rlvect_1\ X0) \wedge (l1_pre_topc\ X0)) \quad (8)$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1\ X1\ (k1_zfmisc_1\ X0)) \Rightarrow (m1_subset_1\ (k3_subset_1\ X0\ X1)\ (k1_zfmisc_1\ X0)) \quad (10)$$

Assume the following.

$$\forall X0. (v7_ordinal1\ X0) \Rightarrow ((v5_rltopsp1\ (k15_euclid\ X0)) \wedge (l1_rltopsp1\ (k15_euclid\ X0))) \quad (11)$$

Assume the following.

$$\forall X0. (m1_subset_1\ X0\ k4_ordinal1) \Rightarrow (v7_ordinal1\ X0) \quad (12)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m2_subset_1\ X0\ k1_numbers\ k5_numbers) \Rightarrow (\forall X1. \\ & (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ X0)))) \Rightarrow \\ & (\forall X2. (m1_subset_1\ X2\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid \\ & X0)))) \Rightarrow ((r3_connsp_1\ (k15_euclid\ X0)\ (k3_subset_1\ (u1_struct_0 \\ & (k15_euclid\ X0))\ X1)\ X2) \Rightarrow (r1_xboole_0\ X1\ X2)))) \end{aligned}$$