

t23_jordan2c (TMP- KkFUW5jGphVd9H4rTsKuLX8Shf9vEusr)

October 27, 2020

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 $r2_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (2)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (3)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (4)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 (k15_euclid X0)))) \Rightarrow (k2_jordan2c X0 X1 = k3_tarski \\ & (ReplSep (toset (\lambda X2 : \iota. m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\ & (k15_euclid X0)))))) (\lambda X2 : \iota. r2_jordan2c X0 X1 X2) (\lambda X2 : \\ & \iota. X2)))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k3_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.(X2 \in X3) \wedge (X3 \in X0))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski\ X0\ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1) \Rightarrow (v7_ordinal1\ X0) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_subset_1\ X0\ k1_numbers\ k5_numbers) \Rightarrow (\forall X1. \\ & (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ X0)))) \Rightarrow \\ & (\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid \\ & X0)))) \Rightarrow ((r2_jordan2c\ X0\ X1\ X2) \Rightarrow (r1_tarski\ X2\ (k2_jordan2c\ X0\ X1)))))) \end{aligned}$$