

t20_jordan23 (TMLN-
MTn2z8tf5Ar61Nug2gATQuMFiHv8VBo)

October 27, 2020

Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v2_jordan23 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_jordan3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k4_finseq_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(v1_xboole_0 X0) \wedge ((X0 \neq X1) \wedge (v1_xboole_0 X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 X0) \Rightarrow \\ & ((\neg v1_xboole_0 X1) \Rightarrow ((k7_partfun1 X0 X1 np_1 = k7_partfun1 X0 (\\ & k4_finseq_5 X0 X1) (k3_finseq_1 X1)) \wedge (k7_partfun1 X0 X1 (k3_finseq_1 \\ & X1) = k7_partfun1 X0 (k4_finseq_5 X0 X1) np_1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1. (m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X2. (m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (k4_jordan3 X0 X1 X2 \neq k1_xboole_0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & ((v2_jordan23 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 (\\ & k15_euclid np_2))) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 \\ & (k15_euclid np_2))) \Rightarrow (((X1 \in k3_topreal1 np_2 X0) \wedge (X2 \in k3_topreal1 \\ & np_2 X0)) \Rightarrow (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) (k4_jordan3 \\ & X0 X1 X2) np_1 = X1)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & ((v2_jordan23 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (\\ & k15_euclid np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ & (k15_euclid np_2)))) \Rightarrow (((X1 \in k3_topreal1 np_2 X0) \wedge (X2 \in k3_topreal1 \\ & np_2 X0)) \Rightarrow (k4_jordan3 X0 X1 X2 = k4_finseq_5 (u1_struct_0 (k15_euclid \\ & np_2)) (k4_jordan3 X0 X2 X1)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (6)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m2_finseq_1 X1 X0) \Rightarrow ((v1_funct_1 X1) \wedge (\\ & (v1_finseq_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & X0)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((m1_finseq_1 X0 (u1_struct_0 \\ & (k15_euclid np_2))) \wedge ((m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ & np_2))) \wedge (m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & (m2_finseq_1 (k4_jordan3 X0 X1 X2) (u1_struct_0 (k15_euclid np_2))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(v1_xboole_0 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 X0))) \Rightarrow (v1_xboole_0 X2)) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & ((v2_jordan23 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (\\ & k15_euclid np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ & (k15_euclid np_2)))) \Rightarrow (((X1 \in k3_topreal1 np_2 X0) \wedge (X2 \in k3_topreal1 \\ & np_2 X0)) \Rightarrow (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) (k4_jordan3 \\ & X0 X1 X2) (k3_finseq_1 (k4_jordan3 X0 X1 X2)) = X2)))))) \end{aligned}$$