

t2_aofa_000
(TMUyKnjdqaQNGiDzEj6EyvUAcGrS2PqLr25)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k19_margrel1 : \iota \Rightarrow \iota$ be given. Let $k1_aofa_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v2_margrel1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k13_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_margrel1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & ((v1_funct_1 X1) \wedge ((v2_margrel1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k3_finseq_2 X0) X0)))))) \Rightarrow (\forall X2. (m1_subset_1 \\ & X2 k5_numbers) \Rightarrow ((r1_tarski (k1_relset_1 (k3_finseq_2 X0) X1) \\ & (k4_finseq_2 X2 X0)) \Rightarrow (k19_margrel1 X1 = X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (k9_xtuple_0 (k2_funcop_1 X0 X1) = X0) \wedge (r1_tarski (k10_xtuple_0 (k2_funcop_1 X0 X1)) (k1_tarski X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (4)$$

Assume the following.

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

Assume the following.

$$\forall X0. k3_finseq_2 X0 = k13_finseq_1 X0 \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 X1) \wedge \\ & ((m1_finseq_2 X2 X0) \wedge (m1_subset_1 X3 X1))) \Rightarrow (k1_aofa_000 X0 X1 \\ & X2 X3 = k2_funcop_1 X2 X3) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((m1_subset_1 \\ & X1 X0) \wedge (v7_ordinal1 X2))) \Rightarrow ((\neg v1_xboole_0 (k2_funcop_1 (k4_finseq_2 \\ & X2 X0) X1)) \wedge ((v1_funct_1 (k2_funcop_1 (k4_finseq_2 X2 X0) X1)) \wedge \\ & ((v2_margrel1 (k2_funcop_1 (k4_finseq_2 X2 X0) X1)) \wedge (v3_margrel1 \\ & (k2_funcop_1 (k4_finseq_2 X2 X0) X1) X0)))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. (v7_ordinal1 X0) \Rightarrow (m1_finseq_2 (k4_finseq_2 X0 X1) X1) \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 X1) \wedge \\ & ((m1_finseq_2 X2 X0) \wedge (m1_subset_1 X3 X1))) \Rightarrow ((v1_funct_1 (k1_aofa_000 \\ & X0 X1 X2 X3)) \wedge (m1_subset_1 (k1_aofa_000 X0 X1 X2 X3) (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k3_finseq_2 X0) X1)))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Leftrightarrow (X0 \in k4_ordinal1) \quad (12)$$

Assume the following.

$$\forall X0. \forall X1. (v1_xboole_0 X0) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 X0))) \Rightarrow (v1_xboole_0 X2)) \quad (13)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow ((v4_relat_1 X2 X0) \wedge (v5_relat_1 X2 X1)) \quad (14)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (15)$$

Theorem 1

$$\begin{aligned} \forall X0. (\neg v1_xboole_0\ X0) \Rightarrow (\forall X1. (m1_subset_1\ X1\ X0) \Rightarrow \\ (\forall X2. (v7_ordinal1\ X2) \Rightarrow (k19_margrel1\ (k1_aofa_000\ X0\ X0 \\ (k4_finseq_2\ X2\ X0)\ X1) = X2))) \end{aligned}$$