

t48_aofa_000 (TMTZSJRTByk-
sWckz5eu6WRho46qJRMz9fnC)

October 27, 2020

Let $v4_unialg_1 : \iota \Rightarrow o$ be given. Let $v6_aofa_000 : \iota \Rightarrow o$ be given. Let $l1_unialg_1 : \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_pua2mss1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_4 : \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $u1_unialg_1 : \iota \Rightarrow \iota$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v2_margrel1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_margrel1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k19_margrel1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k18_margrel1 : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v8_comput_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v2_margrel1 X1) \wedge (m1_subset_1 \\ X1 (k1_zfmisc_1 (k2_zfmisc_1 (k3_finseq_2 X0) X0)))))) \Rightarrow (((v3_margrel1 \\ X1 X0) \wedge (\neg v1_xboole_0 X1)) \Leftrightarrow (k1_relset_1 (k3_finseq_2 X0) X1 = k4_finseq_2 \\ (k19_margrel1 X1) X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

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.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_margrel1 X0))) \Rightarrow (k19_margrel1 X0 = k18_margrel1 X0) \quad (5)$$

Assume the following.

$$\forall X0.(l1_unialg_1 X0) \Rightarrow (m2_finseq_1 (u1_unialg_1 X0) (k4_partfun1 (k3_finseq_2 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Rightarrow ((v1_funct_1 X1) \wedge ((v1_finseq_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (7)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (m1_subset_1 (k4_finseq_1 X0) (k1_zfmisc_1 k5_numbers)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1) \wedge (v2_margrel1 X1)) \Rightarrow ((v8_comput_1 X1 X0) \Leftrightarrow (k18_margrel1 X1 = X0)) \quad (9)$$

Assume the following.

$$\forall X0.((v4_unialg_1 X0) \wedge (l1_unialg_1 X0)) \Rightarrow (\forall X1.(m2_subset_1 X1 k5_numbers (k4_finseq_1 (u1_unialg_1 X0))) \Rightarrow (k2_pua2mss1 X0 X1 = k1_funct_1 (u1_unialg_1 X0) X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (k1_funct_7 X0 X1 = X0) \quad (11)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_unialg_1 X0)) \Rightarrow ((v6_aofa_000 X0) \Leftrightarrow ((np_4 \in k4_finseq_1 (u1_unialg_1 X0)) \wedge ((\neg v1_xboole_0 (k1_funct_1 (u1_unialg_1 X0) np_4)) \wedge ((v1_funct_1 (k1_funct_1 (u1_unialg_1 X0) np_4)) \wedge ((v2_margrel1 (k1_funct_1 (u1_unialg_1 X0) np_4)) \wedge ((v3_margrel1 (k1_funct_1 (u1_unialg_1 X0) np_4) (u1_struct_0 X0)) \wedge ((v8_comput_1 (k1_funct_1 (u1_unialg_1 X0) np_4) np_2) \wedge (m1_subset_1 (k1_funct_1 (u1_unialg_1 X0) np_4) (k1_zfmisc_1 (k2_zfmisc_1 (k3_finseq_2 (u1_struct_0 X0) (u1_struct_0 X0)))))))))))))) \quad (12)$$

Assume the following.

$$\forall X0.(l1_unialg_1 X0) \Rightarrow ((v4_unialg_1 X0) \Rightarrow (\neg v2_struct_0 X0)) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (14)$$

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

$$\forall X0.((v4_unialg_1 X0) \wedge ((v6_aofa_000 X0) \wedge (l1_unialg_1 X0))) \Rightarrow (k1_relset_1 (k3_finseq_2 (u1_struct_0 X0)) (k2_pua2mss1 X0 (k1_funct_7 np_4 (k4_finseq_1 (u1_unialg_1 X0)))) = k4_finseq_2 np_2 (u1_struct_0 X0))$$