

t33_finseq_2

(TMEjejeZy6zupgiKBE9WaeWkEww8r7pURDn)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ & X1))) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (((r1_tarski \\ & (k10_xtuple_0 X0) (k9_xtuple_0 X2)) \wedge (X1 = k3_relat_1 X0 X2)) \Rightarrow (\\ & k3_finseq_1 X1 = k3_finseq_1 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & (((v1_funct_1 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))) \wedge ((v1_funct_1 X5) \wedge (m1_subset_1 X5 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X2 X3)))))) \Rightarrow (k1_partfun1 X0 X1 X2 X3 X4 X5 = k3_relat_1 X4 X5) \end{aligned} \quad (4)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Rightarrow((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1)))\Rightarrow((m1_finseq_1 X1 X0)\Leftrightarrow(r1_tarSKI (k10_xtuple_0 X1) X0)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(((X1\neq k1_xboole_0)\Rightarrow((v1_funct_2 X2 X0 X1)\Leftrightarrow(X0 = k1_relset_1 X0 X2)))\wedge((X1 = k1_xboole_0)\Rightarrow((v1_funct_2 X2 X0 X1)\Leftrightarrow(X2 = k1_xboole_0)))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (11)$$

Theorem 1

$$\forall X0.\forall X1.(\neg v1_xboole_0 X1)\Rightarrow(\forall X2.((v1_relat_1 X2)\wedge((v1_funct_1 X2)\wedge(v1_finseq_1 X2)))\Rightarrow(\forall X3.(m2_finseq_1 X3 X0)\Rightarrow(\forall X4.((v1_funct_1 X4)\wedge((v1_funct_2 X4 X0 X1)\wedge(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))))\Rightarrow((X2 = k1_partfun1 k5_numbers X0 X0 X1 X3 X4)\Rightarrow(k3_finseq_1 X2 = k3_finseq_1 X3))))))$$