

t89_finseq_6
(TMdt1eJzKEgit5wdq6w2akkZPkdUGPziQmo)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_finseq_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_finseq_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ 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 $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_rfinseq : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. 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 $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k8_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\ & (\forall X2. (m2_finseq_1 X2 X0) \Rightarrow ((k7_partfun1 X0 X2 np_1 = X1) \Rightarrow \\ & ((X2 = k1_xboole_0) \vee ((k1_finseq_5 X0 X2 X1 = k12_finseq_1 X0 X1) \wedge \\ & (k2_finseq_5 X0 X2 X1 = X2)))))) \quad (3) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 X0) \Rightarrow \\ & ((X1 \neq k1_xboole_0) \Rightarrow (k7_partfun1 X0 X1 np_1 \in k10_xtuple_0 X1))) \quad (4) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1)))\Rightarrow((X1 = k9_finseq_1 X0)\Leftrightarrow((k3_finseq_1 X1 = np_1)\wedge(k10_xtuple_0 X1 = k1_tarSKI X0))) \quad (5)$$

Assume the following.

$$(k9_xtuple_0 k1_xboole_0 = k1_xboole_0)\wedge(k10_xtuple_0 k1_xboole_0 = k1_xboole_0) \quad (6)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finseq_1 X0)))\Rightarrow((k7_finseq_1 X0 k1_xboole_0 = X0)\wedge(k7_finseq_1 k1_xboole_0 X0 = X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.\forall X2.(m2_finseq_1 X2 X1)\Rightarrow((r1_xxreal_0 (k3_finseq_1 X2) X0)\Rightarrow(v1_xboole_0 (k2_rfinseq X1 X0 X2)))) \quad (8)$$

Assume the following.

$$((v2_xxreal_0 np_1)\wedge(m2_subset_1 np_1 k1_numbers k5_numbers))\wedge((m1_subset_1 np_1 k5_numbers)\wedge(m1_subset_1 np_1 k1_numbers)) \quad (9)$$

Assume the following.

$$r1_xxreal_0 np_1 np_1 \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Leftrightarrow(m1_finseq_1 X1 X0) \quad (11)$$

Assume the following.

$$\forall X0.k9_finseq_1 X0 = k5_finseq_1 X0 \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_finseq_1 X1 X0)\wedge(m1_finseq_1 X2 X0))\Rightarrow(k8_finseq_1 X0 X1 X2 = k7_finseq_1 X1 X2) \quad (13)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow(k12_finseq_1 X0 X1 = k5_finseq_1 X1) \quad (15)$$

Assume the following.

$$\forall X0.v1_finseq_1 (k5_finseq_1 X0) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Rightarrow ((v1_funct_1 X1) \wedge ((v1_finseq_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \quad (18)$$

Assume the following.

$$\forall X0.(v1_relat_1 (k9_finseq_1 X0) \wedge (v1_funct_1 (k9_finseq_1 X0))) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_relat_1 X1) \wedge ((v5_relat_1 X1 X0) \wedge (v1_funct_1 X1))) \Rightarrow (m1_subset_1 (k7_partfun1 X0 X1 X2) X0) \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1 X1) \wedge (m1_finseq_1 X2 X0)) \Rightarrow (m2_finseq_1 (k2_rfinseq X0 X1 X2) X0) \quad (21)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (m2_finseq_1 (k12_finseq_1 X0 X1) X0) \quad (22)$$

Assume the following.

$$\forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 X0) \Rightarrow (((X2 \in k10_xtuple_0 X1) \Rightarrow (k1_finseq_6 X0 X1 X2 = k8_finseq_1 X0 (k2_finseq_5 X0 X1 X2) (k2_rfinseq X0 np_1 (k1_finseq_5 X0 X1 X2)))))) \wedge ((\neg X2 \in k10_xtuple_0 X1) \Rightarrow (k1_finseq_6 X0 X1 X2 = X1)))))) \quad (23)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (24)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow (v5_relat_1 X1 X0) \quad (25)$$

Theorem 1

$$\forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow (k1_finseq_6 X0 X1 (k7_partfun1 X0 X1 np_1) = X1))$$