

t74_finseq_6

(TMRXohvBzFjSiaVqqyThasqoMnmGu9UEc5u)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_finseq_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k17_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ 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. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(\neg v1_xboole_0\ X1) \Rightarrow (\\ \forall X2.(m2_finseq_1\ X2\ X1) \Rightarrow (k17_finseq_1\ X1\ X0\ (k17_finseq_1 \\ X1\ X0\ X2) = k17_finseq_1\ X1\ X0\ X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow \\ (\forall X2.(m2_finseq_1\ X2\ X0) \Rightarrow ((X1 \in k10_xtuple_0\ X2) \Rightarrow (k4_finseq_4 \\ (k1_finseq_5\ X0\ X2\ X1)\ X1 = k4_finseq_4\ X2\ X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1\ X1\ X0) \Leftrightarrow (m1_finseq_1\ X1\ X0) \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1\ X1\ X0) \Rightarrow ((v1_relat_1\ X1) \wedge (\\ (v1_funct_1\ X1) \wedge (v1_finseq_1\ X1))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1\ X0) \wedge ((v1_funct_1\ X0) \wedge (v1_finseq_1 \\ X0))) \Rightarrow (m1_subset_1\ (k4_finseq_4\ X0\ X1)\ k5_numbers) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge(m1_finseq_1 X1 X0))\Rightarrow(m2_finseq_1 (k1_finseq_5 X0 X1 X2) X0) \quad (7)$$

Assume the following.

$$\forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(m2_finseq_1 X1 X0)\Rightarrow(\forall X2.k1_finseq_5 X0 X1 X2 = k17_finseq_1 X0 (k4_finseq_4 X1 X2) X1)) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (9)$$

Theorem 1

$$\forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow(\forall X2.(m2_finseq_1 X2 X0)\Rightarrow((X1 \in k10_xtuple_0 X2)\Rightarrow(k1_finseq_5 X0 (k1_finseq_5 X0 X2 X1) X1 = k1_finseq_5 X0 X2 X1))))$$