

t83_finseq_4 (TMUe- qumWBmf8ExwdgPigcBLhKrPYhA9nKVf)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 X0) \Rightarrow \\ (\forall X2. (m2_finseq_1 X2 X0) \Rightarrow (\neg (r1_tarski X1 X2) \wedge (\forall X3. \\ (m2_finseq_1 X3 X0) \Rightarrow (k8_finseq_1 X0 X1 X3 \neq X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ (\forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ X1)))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow (((r1_xxreal_0 np_1 X2) \wedge \\ (r1_xxreal_0 X2 (k3_finseq_1 X0))) \Rightarrow (k1_funct_1 (k7_finseq_1 \\ X0 X1) X2 = k1_funct_1 X0 X2)))) \end{aligned} \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((m1_finseq_1 X1 X0) \wedge (m1_finseq_1 \\ X2 X0)) \Rightarrow (k8_finseq_1 X0 X1 X2 = k7_finseq_1 X1 X2) \quad (4)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge \\ (v1_funct_1 X1) \wedge (v1_finseq_1 X1)) \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow (\forall X3.(m1_subset_1 X3 k5_numbers) \Rightarrow \\ & (((r1_tarski X1 X2) \wedge ((r1_xxreal_0 np_1 X3) \wedge (r1_xxreal_0 X3 (\\ & k3_finseq_1 X1)))) \Rightarrow (k1_funct_1 X2 X3 = k1_funct_1 X1 X3)))))) \end{aligned}$$