

t65_seq_4
(TMGeD9d6mgNDmjaWui64ktYdWXsh2ebfgjR)

October 27, 2020

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 $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $k14_seq_4 : \iota \Rightarrow \iota$ be given. Let $k15_seq_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_2 X1 X0) \Rightarrow (\forall X2. (m2_finseq_2 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ (m2_finseq_2 X1 k2_numbers (k14_seq_4 X0)) \Rightarrow (\forall X2. (m2_finseq_2 \\ X2 k2_numbers (k14_seq_4 X0)) \Rightarrow (\forall X3. (m2_finseq_2 X3 k2_numbers \\ (k14_seq_4 X0)) \Rightarrow ((k15_seq_4 X0 X1 X2 = k15_seq_4 X0 X3 X2) \Rightarrow (X1 = X3)))))) \end{aligned} \quad (4)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (5)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (m1_finseq_2 (k14_seq_4 X0) k2_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((m1_subset_1 X0 k5_numbers) \wedge \\ & ((m1_subset_1 X1 (k14_seq_4 X0)) \wedge (m1_subset_1 X2 (k14_seq_4 X0)))) \Rightarrow \\ & (k15_seq_4 X0 X1 X2 = k15_seq_4 X0 X2 X1) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & (m2_finseq_2 X1 k2_numbers (k14_seq_4 X0)) \Rightarrow (\forall X2.(m2_finseq_2 \\ & X2 k2_numbers (k14_seq_4 X0)) \Rightarrow (\forall X3.(m2_finseq_2 X3 k2_numbers \\ & (k14_seq_4 X0)) \Rightarrow (((k15_seq_4 X0 X1 X2 = k15_seq_4 X0 X3 X2) \vee (k15_seq_4 \\ & X0 X1 X2 = k15_seq_4 X0 X2 X3)) \Rightarrow (X1 = X3)))))) \end{aligned}$$