

t11_radix_3
(TMangkfD9FqFCmixv8V8zVXsFz3EZZkEaZ6)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_radix_3 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (\neg v1_xboole_0 X1) \Rightarrow (\\ \forall X2. ((v3_card_1 X2 X0) \wedge (m2_finseq_1 X2 X1)) \Rightarrow (k4_finseq_1 \\ X2 = k2_finseq_1 X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. \forall X2. (m2_finseq_1 \\ X2 X1) \Rightarrow ((X0 \in k4_finseq_1 X2) \Rightarrow (k1_funct_1 X2 X0 \in X1))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow ((\neg v1_xboole_0 (k4_radix_3 X0)) \wedge \\ (m1_subset_1 (k4_radix_3 X0) (k1_zfmisc_1 k4_numbers))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ X0)) \Rightarrow (v1_xboole_0 X1)) \end{aligned} \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1\ X2) \Rightarrow (\forall X3.((v3_card_1\ X3\ X1) \wedge (m2_finseq_1 \\ & X3\ (k4_radix_3\ X2))) \Rightarrow ((X0 \in k2_finseq_1\ X1) \Rightarrow (m2_subset_1\ (k1_funct_1 \\ & X3\ X0)\ k4_numbers\ (k4_radix_3\ X2)))))) \end{aligned}$$