

t13_seq_2

(TMVGgF2b2vbKHdfWUQPS8FDerayoKHU1hH)

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Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_comseq_2 : \iota \Rightarrow o$ be given. Let $v1_comseq_2 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k37_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k35_valued_1 : \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $k36_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$k5_numbers = k4_ordinal1 \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v3_membered X1) \wedge ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow (k37_valued_1 X0 X1 X2 = k35_valued_1 X2) \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1_membered X1) \wedge ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow (k36_valued_1 X0 X1 X2 = k35_valued_1 X2) \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v3_membered X1) \wedge ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow (k37_valued_1 X0 X1 (k37_valued_1 X0 X1 X2) = X2) \tag{4}$$

Assume the following.

$$v3_membered k1_numbers \tag{5}$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v3_membered \ X1)\wedge((v1_funct_1 \\ & X2)\wedge(m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1))))))\Rightarrow((v1_funct_1 \\ & (k37_valued_1 \ X0 \ X1 \ X2))\wedge(m1_subset_1 \ (k37_valued_1 \ X0 \ X1 \ X2) \ (\\ & k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ k1_numbers)))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v1_membered \ X1)\wedge((v1_funct_1 \\ & X2)\wedge(m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1))))))\Rightarrow((v1_funct_1 \\ & (k36_valued_1 \ X0 \ X1 \ X2))\wedge(m1_subset_1 \ (k36_valued_1 \ X0 \ X1 \ X2) \ (\\ & k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ k2_numbers)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v3_membered \ X0)\Rightarrow(v1_membered \ X0) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(\neg v1_xboole_0 \ X1)\Rightarrow(\forall X2.(m1_subset_1 \\ & X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1)))\Rightarrow((v1_funct_2 \ X2 \ X0 \ X1)\Rightarrow(\\ & v1_partfun1 \ X2 \ X0))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 \ X0 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \\ & k2_numbers)))\Rightarrow(((v1_funct_1 \ X0)\wedge((v1_funct_2 \ X0 \ k5_numbers \\ & k2_numbers)\wedge(\neg v1_comseq_2 \ X0)))\Rightarrow((v1_funct_1 \ X0)\wedge((v1_funct_2 \\ & X0 \ k5_numbers \ k2_numbers)\wedge(\neg v2_comseq_2 \ X0)))) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1 \ X2 \ (k1_zfmisc_1 \\ & (k2_zfmisc_1 \ X0 \ X1)))\Rightarrow((v1_partfun1 \ X2 \ X0)\Rightarrow(v1_funct_2 \ X2 \ X0 \ X1)) \end{aligned} \quad (12)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1 \ X0)\wedge((v1_funct_2 \ X0 \ k5_numbers \ k1_numbers)\wedge \\ & (m1_subset_1 \ X0 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ k1_numbers))))))\Rightarrow \\ & ((v2_comseq_2 \ X0)\Rightarrow(v1_comseq_2 \ X0)) \end{aligned}$$