

t7_seq_2

(TMdmm3rM7f5QgA3NcREvfPU3EVn9HaKSWFs)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. 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 $k26_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k24_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((v3_membered X1) \wedge (((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \wedge (v1_xreal_0 X3))) \Rightarrow (k26_valued_1 X0 X1 X2 X3 = k24_valued_1 X2 X3) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v3_membered\ X1)\wedge((v1_funct_1\ X2)\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))))))\Rightarrow(k37_valued_1\ X0\ X1\ (k37_valued_1\ X0\ X1\ X2) = X2) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_funct_1\ X0)\wedge((v1_funct_2\ X0\ k5_numbers\ k2_numbers)\wedge((v2_comseq_2\ X0)\wedge(m1_subset_1\ X0\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ k2_numbers))))))\wedge(v1_xcmplx_0\ X1))\Rightarrow((v1_funct_1\ (k24_valued_1\ X0\ X1))\wedge((v1_funct_2\ (k24_valued_1\ X0\ X1)\ k5_numbers\ k2_numbers)\wedge(v2_comseq_2\ (k24_valued_1\ X0\ X1)))) \quad (6)$$

Assume the following.

$$v3_membered\ k1_numbers \quad (7)$$

Assume the following.

$$\neg v1_xboole_0\ k1_numbers \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v3_membered\ X1)\wedge((v1_funct_1\ X2)\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))))))\Rightarrow(((v1_funct_1\ (k37_valued_1\ X0\ X1\ X2))\wedge(m1_subset_1\ (k37_valued_1\ X0\ X1\ X2)\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ k1_numbers)))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_membered\ X1)\wedge((v1_funct_1\ X2)\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))))))\Rightarrow(((v1_funct_1\ (k36_valued_1\ X0\ X1\ X2))\wedge(m1_subset_1\ (k36_valued_1\ X0\ X1\ X2)\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ k2_numbers)))) \quad (10)$$

Assume the following.

$$\forall X0.(v3_membered\ X0)\Rightarrow(v1_membered\ X0) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0)\Rightarrow(v1_xcmplx_0\ X0) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(\neg v1_xboole_0\ X1)\Rightarrow(\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))\Rightarrow((v1_funct_2\ X2\ X0\ X1)\Rightarrow(v1_partfun1\ X2\ X0)))) \quad (13)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))\Rightarrow((v1_partfun1 X2 X0)\Rightarrow(v1_funct_2 X2 X0 X1)) \end{aligned} \tag{14}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0)\Rightarrow(\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 \\ & X1 k5_numbers k1_numbers)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers k1_numbers))))))\Rightarrow((v2_comseq_2 X1)\Rightarrow(v2_comseq_2 \\ & (k26_valued_1 k5_numbers k1_numbers X1 X0)))) \end{aligned}$$