

l45_idea_1

(TMEtZSCzUpqdSz533rzMKf7YzyGcvw6AayF)

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Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $k1_recdef_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_idea_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k15_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v4_valued_0 : \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ 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.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((m1_subset_1 \\ & X3 X0) \wedge (m1_subset_1 X4 X0)) \Rightarrow (k15_funcop_1 X0 X1 X2 X3 X4 = k14_funcop_1 \\ & X1 X2 X3 X4) \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Rightarrow((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1))) \quad (7)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v4_valued_0 X0)))\Rightarrow(m2_subset_1 (k1_recdef_1 X0 X1) k1_numbers k5_numbers) \quad (9)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k5_numbers)\Rightarrow(m2_finseq_1 (k13_idea_1 X0) k5_numbers) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((X0 = X1)\Rightarrow(k14_funcop_1 X0 X1 X2 X3 = X2))\wedge((X0\neq X1)\Rightarrow(k14_funcop_1 X0 X1 X2 X3 = X3)) \quad (11)$$

Assume the following.

$$\forall X0.(m2_finseq_1 X0 k5_numbers)\Rightarrow(\forall X1.(m2_finseq_1 X1 k5_numbers)\Rightarrow((X1 = k13_idea_1 X0)\Leftrightarrow((k3_finseq_1 X1 = k3_finseq_1 X0)\wedge(\forall X2.(m1_subset_1 X2 k5_numbers)\Rightarrow((X2 \in k4_finseq_1 X0)\Rightarrow(k1_recdef_1 X1 X2 = k15_funcop_1 k5_numbers X2 np_2 (k1_recdef_1 X0 np_3) (k15_funcop_1 k5_numbers X2 np_3 (k1_recdef_1 X0 np_2) (k1_recdef_1 X0 X2)))))))) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow(v5_relat_1 X1 X0) \quad (13)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge(v5_relat_1 X0 k5_numbers))\Rightarrow((v1_relat_1 X0)\wedge(v4_valued_0 X0)) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (15)$$

Theorem 1

$$\forall X0.(m2_finseq_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 X1 k5_numbers) \Rightarrow ((X1 \in k4_finseq_1 X0) \Rightarrow ((X1 = np_2) \vee ((X1 = np_3) \vee (k1_reodef_1 (k13_idea_1 X0) X1 = k1_reodef_1 X0 X1))))))$$