

t6_mssublat
(TMY9SHc46b9TxNQhi6z4qn9pFaE5QKBYPmi)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ 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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ 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.

$$k5_numbers = k4_ordinal1 \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 X0) \wedge \\ & (((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))))) \wedge (m1_subset_1 X3 X0))) \Rightarrow (k3_funct_2 X0 \\ & X1 X2 X3 = k1_funct_1 X2 X3) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (k3_finseq_1 X0 = k1_card_1 X0) \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(v7_ordinal1\ X0)\Rightarrow((v1_relat_1\ (k2_finseq_2\ X0\ X1))\wedge((v1_funct_1\ (k2_finseq_2\ X0\ X1))\wedge((v3_card_1\ (k2_finseq_2\ X0\ X1)\ X0)\wedge(v1_finseq_1\ (k2_finseq_2\ X0\ X1)))))) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0\ k1_numbers \quad (7)$$

Assume the following.

$$\forall X0.(v1_funct_1\ (k7_finseq_2\ X0))\wedge((v1_funct_2\ (k7_finseq_2\ X0)\ k5_numbers\ (k3_finseq_2\ (k1_tarski\ X0)))\wedge(m1_subset_1\ (k7_finseq_2\ X0)\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ (k3_finseq_2\ (k1_tarski\ X0)))))) \quad (8)$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (9)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_finseq_1\ X0)))\Rightarrow(m2_subset_1\ (k3_finseq_1\ X0)\ k1_numbers\ k5_numbers) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(v3_card_1\ X1\ X0)\Leftrightarrow(k1_card_1\ X1 = X0) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((v1_funct_1\ X1)\wedge((v1_funct_2\ X1\ k5_numbers\ (k3_finseq_2\ (k1_tarski\ X0)))\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ (k3_finseq_2\ (k1_tarski\ X0)))))))\Rightarrow((X1 = k7_finseq_2\ X0)\Leftrightarrow(\forall X2.(m1_subset_1\ X2\ k5_numbers)\Rightarrow(k3_funct_2\ k5_numbers\ (k3_finseq_2\ (k1_tarski\ X0))\ X1\ X2 = k2_finseq_2\ X2\ X0))) \quad (12)$$

Theorem 1

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.((v1_relat_1\ X1)\wedge((v1_funct_1\ X1)\wedge(v1_finseq_1\ X1)))\Rightarrow((X1 = k1_funct_1\ (k7_finseq_2\ k6_numbers)\ X0)\Rightarrow(k3_finseq_1\ X1 = X0)))$$