

t18_matrix_2
(TMWYeSU8u957rCA6YGBarPsc7g4QpLKxErU)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k11_matrix_2 : \iota \Rightarrow \iota$ be given. Let $k12_matrix_2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v3_matrix_2 : \iota \Rightarrow o$ be given. Let $k10_matrix_2 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ 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.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1_subset_1 X1 (k1_zfmisc_1 X2)) \wedge (v1_xboole_0 X2)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))) \Rightarrow (k1_relset_1 X0 X1 = X0)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(k2_finseq_1\ X0 = k1_finseq_1\ X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1\ X1)\wedge(v4_relat_1\ X1\ X0))\Rightarrow(k1_relset_1\ X0\ X1 = k9_xtuple_0\ X1) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0\ X0)\wedge(v3_matrix_2\ X0))\Rightarrow(k11_matrix_2\ X0 = k10_matrix_2\ X0) \quad (8)$$

Assume the following.

$$(\neg v1_xboole_0\ k4_ordinal1)\wedge(v3_ordinal1\ k4_ordinal1) \quad (9)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow((\neg v1_xboole_0\ (k12_matrix_2\ X0))\wedge(v3_matrix_2\ (k12_matrix_2\ X0))) \quad (10)$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (11)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0\ X0)\wedge(v3_matrix_2\ X0))\Rightarrow(v7_ordinal1\ (k10_matrix_2\ X0)) \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(X1 = k12_matrix_2\ X0)\Leftrightarrow \\ (\forall X2.(X2 \in X1)\Leftrightarrow((v1_funct_1\ X2)\wedge((v1_funct_2\ X2\ (k2_finseq_1\ X0)\ (k2_finseq_1\ X0))\wedge((v3_funct_2\ X2\ (k2_finseq_1\ X0)\ (k2_finseq_1\ X0))\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k2_finseq_1\ X0)\ (k2_finseq_1\ X0)))))))))) \end{aligned} \quad (13)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0\ X0)\wedge(v3_matrix_2\ X0))\Rightarrow(\forall X1. \\ (v7_ordinal1\ X1)\Rightarrow((X1 = k10_matrix_2\ X0)\Leftrightarrow(\exists X2.((v1_relat_1\ X2)\wedge((v1_funct_1\ X2)\wedge(v1_finseq_1\ X2))))\wedge((X2 \in X0)\wedge(X1 = k3_finseq_1\ X2)))))) \end{aligned} \quad (14)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_finseq_1\ X0)))\Rightarrow \\ (\forall X1.(m2_subset_1\ X1\ k1_numbers\ k5_numbers)\Rightarrow((X1 = k3_finseq_1\ X0)\Leftrightarrow(k2_finseq_1\ X1 = k9_xtuple_0\ X0))) \end{aligned} \quad (15)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Leftrightarrow(X0 \in k4_ordinal1) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow((v4_relat_1\ X2\ X0)\wedge(v5_relat_1\ X2\ X1)) \quad (17)$$

Theorem 1 $\forall X0.(v7_ordinal1\ X0)\Rightarrow(k11_matrix_2\ (k12_matrix_2\ X0) = X0).$