

t21_matrixc1
(TMYAXaWd6ZKo9cR4ki9uciwjrjkkBRVbwHe)

October 27, 2020

Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k9_matrix_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_valued_0 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v4_valued_0 : \iota \Rightarrow o$ be given. Let $v5_valued_0 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X0 \in k2_finseq_1 X1) \Leftrightarrow ((r1_xxreal_0 np_1 X0) \wedge (r1_xxreal_0 X0 X1)))) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0 : \iota \Rightarrow \iota \Rightarrow o. \forall X1. \forall X2. (\forall X3. \neg \\ (X3 \in X2) \wedge (\forall X4. \neg (X4 \in X1) \wedge (X0 \ X3 \ X4))) \Rightarrow (\exists X3. ((v1_funct_1 \\ X3) \wedge ((v1_funct_2 \ X3 \ X2 \ X1) \wedge (m1_subset_1 \ X3 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \\ X2 \ X1)))))) \wedge (\forall X4. (X4 \in X2) \Rightarrow (X0 \ X4 \ (k1_funct_1 \ X3 \ X4)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 \ X0) \wedge ((\neg v1_xboole_0 \ X1) \wedge \\ (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ X2 \ X0 \ X1) \Leftrightarrow (m1_subset_1 \ X2 \ X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1_relat_1 \ X0) \wedge ((v1_funct_1 \ X0) \wedge (v1_valued_0 \\ X0))) \Rightarrow (k9_matrix_5 \ X0 \ X1 = k1_funct_1 \ X0 \ X1) \end{aligned} \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

Assume the following.

$$\begin{aligned} \exists X0. (m1_subset_1 \ X0 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \\ k5_numbers))) \wedge ((\neg v1_xboole_0 \ X0) \wedge ((v1_relat_1 \ X0) \wedge ((v4_relat_1 \\ X0 \ k5_numbers) \wedge ((v5_relat_1 \ X0 \ k5_numbers) \wedge ((v1_funct_1 \ X0) \wedge \\ ((v1_partfun1 \ X0 \ k5_numbers) \wedge ((v1_funct_2 \ X0 \ k5_numbers \ k5_numbers) \wedge \\ ((v1_valued_0 \ X0) \wedge ((v2_valued_0 \ X0) \wedge ((v3_valued_0 \ X0) \wedge ((v4_valued_0 \\ X0) \wedge (v5_valued_0 \ X0)))))))))))))) \end{aligned} \quad (9)$$

Assume the following.

$$v6_membered \ k4_ordinal1 \quad (10)$$

Assume the following.

$$\neg v1_xboole_0 \ k2_numbers \quad (11)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (12)$$

Assume the following.

$$v1_membered \ k2_numbers \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Rightarrow((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow(m1_subset_1 (k9_matrix_5 X0 X1) k2_numbers) \quad (15)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (16)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finseq_1 X0)))\Rightarrow(m2_subset_1 (k3_finseq_1 X0) k1_numbers k5_numbers) \quad (17)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(m1_subset_1 (k2_finseq_1 X0) (k1_zfmisc_1 k5_numbers)) \quad (18)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finseq_1 X0)))\Rightarrow(\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers)\Rightarrow((X1 = k3_finseq_1 X0)\Leftrightarrow(k2_finseq_1 X1 = k9_xtuple_0 X0))) \quad (19)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge(v1_funct_1 X0))\Rightarrow(\forall X1.\forall X2.((X1 \in k9_xtuple_0 X0)\Rightarrow((X2 = k1_funct_1 X0 X1)\Leftrightarrow(k4_tarski X1 X2 \in X0)))\wedge((\neg X1 \in k9_xtuple_0 X0)\Rightarrow((X2 = k1_funct_1 X0 X1)\Leftrightarrow(X2 = k1_xboole_0)))) \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.(v1_xboole_0 X0)\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 X0)))\Rightarrow(v1_xboole_0 X2)) \quad (21)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (22)$$

Assume the following.

$$\forall X0.(v6_membered X0)\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow(v7_ordinal1 X1)) \quad (23)$$

Assume the following.

$$\forall X0.\forall X1.(v1_membered\ X1)\Rightarrow(\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow(v1_valued_0\ X2)) \quad (24)$$

Theorem 1

$$\begin{aligned} \forall X0.(m2_finseq_1\ X0\ k2_numbers)\Rightarrow(\exists X1.((v1_funct_1\ X1)\wedge((v1_funct_2\ X1\ k5_numbers\ k2_numbers)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ k2_numbers))))))\wedge(\forall X2. \\ (v7_ordinal1\ X2)\Rightarrow(((r1_xxreal_0\ np_1\ X2)\wedge(r1_xxreal_0\ X2\ (k3_finseq_1\ X0)))\Rightarrow(k9_matrix_5\ X1\ X2 = k9_matrix_5\ X0\ X2)))) \end{aligned}$$