

t76_matrixr2
(TMSSn4KztMAESJADmSqPjC3sosZkz2KaAix)

October 27, 2020

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 $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_matrixr2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k2_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ 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 $v1_finseq_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.\forall X2.(X2 \in k2_finseq_1 X0) \Rightarrow (k1_funct_1 (k2_finseq_2 X0 X1) X2 = X1)) \quad (1)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.\forall X2.\forall X3.(X2 \neq X3) \Rightarrow (k1_funct_1 (k2_funct_7 X0 X2 X1) X3 = k1_funct_1 X0 X3)) \quad (2)$$

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.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0) \wedge ((v7_ordinal1 X1) \wedge (m1_subset_1 X2 X0))) \Rightarrow (k5_finseq_2 X0 X1 X2 = k2_finseq_2 X1 X2) \quad (5)$$

Assume the following.

$$\neg v1_finset_1 \ k4_ordinal1 \quad (6)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 \ X0)\wedge((\neg v1_xboole_0 \ X1)\wedge \\ (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0))))\Rightarrow(\forall X2.(m2_subset_1 \\ X2 \ X0 \ X1)\Rightarrow(m1_subset_1 \ X2 \ X0)) \end{aligned} \quad (8)$$

Assume the following.

$$m2_subset_1 \ k6_numbers \ k1_numbers \ k5_numbers \quad (9)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(v7_ordinal1 \ X0)\Rightarrow((v1_relat_1 \ (k2_finseq_2 \\ X0 \ X1))\wedge((v1_funct_1 \ (k2_finseq_2 \ X0 \ X1))\wedge(v1_finseq_1 \ (k2_finseq_2 \\ X0 \ X1)))) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 \ X0)\Rightarrow(\forall X1.(v7_ordinal1 \ X1)\Rightarrow(k6_matrixr2 \\ X0 \ X1 = k2_funct_7 \ (k5_finseq_2 \ k1_numbers \ X0 \ k6_numbers) \ X1 \ np_1)) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0)\Rightarrow(v1_finset_1 \ X0) \quad (13)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 \ X0)\Rightarrow(\forall X1.(v7_ordinal1 \ X1)\Rightarrow(\forall X2. \\ (v7_ordinal1 \ X2)\Rightarrow(((r1_xxreal_0 \ np_1 \ X0)\wedge(r1_xxreal_0 \ X0 \ X1))\Rightarrow \\ ((X2 = X0)\vee(k1_funct_1 \ (k6_matrixr2 \ X1 \ X2) \ X0 = k6_numbers)))))) \end{aligned}$$