

t37_matrix_1 (TMZfedbFnC- ThbS1Gk4nyYz7Gw9RsVxdmhwq)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\neg(k6_numbers \neq X0) \wedge (r1_xxreal_0 X0 k6_numbers)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2.(v7_ordinal1 \\ & X2) \Rightarrow (\forall X3.((v1_matrix_1 X3) \wedge (m2_finseq_1 X3 (k3_finseq_2 \\ & X0)))) \Rightarrow (((r1_xxreal_0 np_1 X1) \wedge ((r1_xxreal_0 X1 (k3_finseq_1 \\ & X3)) \wedge ((r1_xxreal_0 np_1 X2) \wedge (r1_xxreal_0 X2 (k1_matrix_1 X3)))))) \Rightarrow \\ & (k4_tarski X1 X2 \in k2_matrix_1 X3))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (\neg v1_xboole_0 X2) \Rightarrow ((\neg r1_xxreal_0 X0 k1_xboole_0) \Rightarrow (\forall X3. \\ & (m1_matrix_1 X3 X2 X0 X1) \Rightarrow ((k3_finseq_1 X3 = X0) \wedge ((k1_matrix_1 \\ & X3 = X1) \wedge (k2_matrix_1 X3 = k2_zfmisc_1 (k2_finseq_1 X0) (k2_finseq_1 \\ & X1)))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\neg v1_xboole_0 \ np_1 \tag{5}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{6}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{7}$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \tag{8}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 \ X0)\wedge(v7_ordinal1 \\ X1)\wedge(v7_ordinal1 \ X2))\Rightarrow(\forall X3.(m1_matrix_1 \ X3 \ X0 \ X1 \ X2)\Rightarrow \\ ((v1_matrix_1 \ X3)\wedge(m2_finseq_1 \ X3 \ (k3_finseq_2 \ X0)))) \end{aligned} \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.k4_tarski \ X0 \ X1 = k2_tarski \ (k2_tarski \ X0 \ X1) \ (k1_tarski \ X0) \tag{10}$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 \ X0)\Rightarrow(\forall X1.(v7_ordinal1 \ X1)\Rightarrow(\\ \forall X2.(v7_ordinal1 \ X2)\Rightarrow(\forall X3.((v1_matrix_1 \ X3)\wedge \\ m2_finseq_1 \ X3 \ (k3_finseq_2 \ X0))\Rightarrow((m1_matrix_1 \ X3 \ X0 \ X1 \ X2)\Leftrightarrow(\\ (k3_finseq_1 \ X3 = X1)\wedge(\forall X4.(m2_finseq_1 \ X4 \ X0)\Rightarrow((X4 \in k10_xtuple_0 \\ X3)\Rightarrow(k3_finseq_1 \ X4 = X2)))))))) \end{aligned} \tag{11}$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k4_ordinal1)\Rightarrow(v7_ordinal1 \ X0) \tag{12}$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 \ X0)\Rightarrow(\forall X1.(v7_ordinal1 \ X1)\Rightarrow(\forall X2. \\ (v7_ordinal1 \ X2)\Rightarrow(\forall X3.(v7_ordinal1 \ X3)\Rightarrow(\forall X4.(\\ \neg v1_xboole_0 \ X4)\Rightarrow(\forall X5.(m1_matrix_1 \ X5 \ X4 \ X0 \ X1)\Rightarrow(((r1_xxreal_0 \\ np_1 \ X2)\wedge((r1_xxreal_0 \ X2 \ X0)\wedge((r1_xxreal_0 \ np_1 \ X3)\wedge(r1_xxreal_0 \\ X3 \ X1))))\Rightarrow(k4_tarski \ X2 \ X3 \in k2_matrix_1 \ X5)))))) \end{aligned}$$