

t2_matrixr2 (TM- RgdnqQPMHu1Q3VTi5jN14MmkGjUy8FEub)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ 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 $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k3_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_matrix_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (v7_ordinal1 X1) \Rightarrow (\forall X2. (v7_ordinal1 \\ & X2) \Rightarrow (\forall X3. ((v1_matrix_1 X3) \wedge (m2_finseq_1 X3 (k3_finseq_2 \\ & X0))) \Rightarrow (((r1_xxreal_0 np_1 X1) \wedge (r1_xxreal_0 X1 (k3_finseq_1 \\ & X3)) \wedge ((r1_xxreal_0 np_1 X2) \wedge (r1_xxreal_0 X2 (k1_matrix_1 X3)))) \Rightarrow \\ & (k4_tarski X1 X2 \in k2_matrix_1 X3)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{2}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((v1_matrix_1 X1) \wedge \\ & (m1_finseq_1 X1 (k3_finseq_2 X0))) \wedge ((v7_ordinal1 X2) \wedge (v7_ordinal1 \\ & X3))) \Rightarrow (m1_subset_1 (k3_matrix_1 X0 X1 X2 X3) X0) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_matrix_1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 \\ & X0))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow (\forall X3. (v7_ordinal1 \\ & X3) \Rightarrow ((k4_tarski X2 X3 \in k2_matrix_1 X1) \Rightarrow (\forall X4. (m1_subset_1 \\ & X4 X0) \Rightarrow ((X4 = k3_matrix_1 X0 X1 X2 X3) \Leftrightarrow (\exists X5. (m2_finseq_1 \\ & X5 X0) \wedge ((X5 = k1_funct_1 X1 X2) \wedge (X4 = k1_funct_1 X5 X3))))))) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 k5_numbers) \Rightarrow \\ & \quad (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3.((v1_matrix_1 \\ & \quad X3) \wedge (m2_finseq_1 X3 (k3_finseq_2 X0))) \Rightarrow (\forall X4.(m2_finseq_1 \\ X4 X0) \Rightarrow (((X4 = k1_funct_1 X3 X1) \wedge ((r1_xxreal_0 np_1 X1) \wedge ((r1_xxreal_0 \\ & \quad X1 (k3_finseq_1 X3)) \wedge ((r1_xxreal_0 np_1 X2) \wedge ((r1_xxreal_0 X2 \\ & \quad (k1_matrix_1 X3)) \wedge (k3_finseq_1 X4 = k1_matrix_1 X3)))))) \Rightarrow (k3_matrix_1 \\ & \quad X0 X3 X1 X2 = k1_funct_1 X4 X2)))))) \end{aligned}$$