

t23_matrixr1

(TMSqFT2Et2y1T9QFeq4AESUP4ATeFpmvJps)

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

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((v1_matrix_1 X1) \wedge \\ & (m1_finseq_1 X1 (k3_finseq_2 X0))) \wedge ((v7_ordinal1 X2) \wedge (v7_ordinal1 \\ & X3))) \Rightarrow (m1_subset_1 (k3_matrix_1 X0 X1 X2 X3) X0) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_matrix_1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 \\ & X0))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow (\forall X3. (v7_ordinal1 \\ & X3) \Rightarrow ((k4_tarski X2 X3 \in k2_matrix_1 X1) \Rightarrow (\forall X4. (m1_subset_1 \\ & X4 X0) \Rightarrow ((X4 = k3_matrix_1 X0 X1 X2 X3) \Leftrightarrow (\exists X5. (m2_finseq_1 \\ & X5 X0) \wedge ((X5 = k1_funct_1 X1 X2) \wedge (X4 = k1_funct_1 X5 X3))))))) \end{aligned} \quad (3)$$

Theorem 1

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