

t94_matrixr2
(TMTu9DTd3KXsZdDPVnyQYpKHPmuxvS3i6NW)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m1_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k11_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k4_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.((v1_matrix_1 \\ X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 k1_numbers))) \Rightarrow (\neg(\neg r1_xxreal_0 \\ (k3_finseq_1 X1) k6_numbers) \wedge (\neg r1_xxreal_0 (k1_matrix_1 X1) \\ k6_numbers) \wedge (((k3_finseq_1 X1 = k3_finseq_1 X0) \vee (k1_matrix_1 \\ (k4_matrix_1 k1_numbers X1) = k3_finseq_1 X0)) \wedge (k11_matrixr1 \\ (k4_matrix_1 k1_numbers X1) X0 \neq k12_matrixr1 X1 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_matrix_1 \\ X1 k1_numbers X0 X0) \Rightarrow (\forall X2.(m1_matrix_1 X2 k1_numbers X0 \\ X0) \Rightarrow ((k3_finseq_1 (k6_matrixr1 X1 X2) = k3_finseq_1 X1) \wedge ((k1_matrix_1 \\ (k6_matrixr1 X1 X2) = k1_matrix_1 X2) \wedge ((k3_finseq_1 (k6_matrixr1 \\ X1 X2) = X0) \wedge (k1_matrix_1 (k6_matrixr1 X1 X2) = X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((v7_ordinal1 X0) \wedge (\neg v1_xboole_0 \\ X1) \wedge (m1_matrix_1 X2 X1 X0 X0)) \Rightarrow (k5_matrix_1 X0 X1 X2 = k4_matrix_1 \\ X1 X2) \end{aligned} \quad (4)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 \ X0) \wedge ((v7_ordinal1 \\ X1) \wedge (v7_ordinal1 \ X2))) \Rightarrow (\forall X3. (m1_matrix_1 \ X3 \ X0 \ X1 \ X2) \Rightarrow \\ ((v1_matrix_1 \ X3) \wedge (m2_finseq_1 \ X3 \ (k3_finseq_2 \ X0)))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0. (m1_subset_1 \ X0 \ k5_numbers) \Rightarrow (\forall X1. (m2_finseq_1 \\ X1 \ k1_numbers) \Rightarrow (\forall X2. (m1_matrix_1 \ X2 \ k1_numbers \ X0 \ X0) \Rightarrow \\ ((k3_finseq_1 \ X1 = X0) \Rightarrow ((r1_xxreal_0 \ X0 \ k6_numbers) \vee (k11_matrixr1 \\ (k5_matrix_1 \ X0 \ k1_numbers \ X2) \ X1 = k12_matrixr1 \ X2 \ X1)))))) \end{aligned}$$