

t89_matrixr2 (TMVGHeYwC- cXqhg2ermb7fUPkuZwyTtwJgPg)

October 27, 2020

Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m2_finseq.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m1_matrix.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_matrixr2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq.1 : \iota \Rightarrow \iota$ be given. Let $k12_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_matrixr2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_matrixr2 : \iota \Rightarrow \iota$ 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 $k6_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xboole.0 : \iota \Rightarrow o$ be given. Let $k2_matrix.1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq.1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_matrixr2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset.1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq.1 \\ & X1 k1_numbers) \Rightarrow ((k3_finseq.1 X1 = X0) \Rightarrow (k12_matrixr1 (k4_matrixr2 \\ & X0) X1 = X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq.1 X0 k1_numbers) \Rightarrow (\forall X1.((v1_matrix.1 \\ & X1) \wedge (m2_finseq.1 X1 (k3_finseq.2 k1_numbers))) \Rightarrow (\forall X2. \\ & ((v1_matrix.1 X2) \wedge (m2_finseq.1 X2 (k3_finseq.2 k1_numbers))) \Rightarrow \\ & (((k3_finseq.1 X0 = k3_finseq.1 X1) \wedge (k1_matrix.1 X1 = k3_finseq.1 \\ & X2)) \Rightarrow (k12_matrixr1 (k6_matrixr1 X1 X2) X0 = k12_matrixr1 X2 (k12_matrixr1 \\ & X1 X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(\neg v1_xboole.0 X1) \Rightarrow (\\ & \forall X2.(m1_matrix.1 X2 X1 X0 X0) \Rightarrow ((k3_finseq.1 X2 = X0) \wedge ((k1_matrix.1 \\ & X2 = X0) \wedge (k2_matrix.1 X2 = k2_zfmisc.1 (k2_finseq.1 X0) (k2_finseq.1 \\ & X0)))))) \end{aligned} \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_subset_1 X0 k5_numbers) \wedge \\ & ((m1_matrix_1 X1 k1_numbers X0 X0) \wedge (m1_matrix_1 X2 k1_numbers \\ & X0 X0))) \Rightarrow (k1_matrixr2 X0 X1 X2 = k6_matrixr1 X1 X2) \end{aligned} \quad (5)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (6)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((v7_ordinal1 \\ & X1) \wedge (v7_ordinal1 X2))) \Rightarrow (\forall X3. (m1_matrix_1 X3 X0 X1 X2) \Rightarrow \\ & ((v1_matrix_1 X3) \wedge (m2_finseq_1 X3 (k3_finseq_2 X0)))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1 X0 k5_numbers) \wedge (m1_matrix_1 \\ & X1 k1_numbers X0 X0)) \Rightarrow (m1_matrix_1 (k7_matrixr2 X0 X1) k1_numbers \\ & X0 X0) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. (m1_matrix_1 \\ & X1 k1_numbers X0 X0) \Rightarrow ((v1_matrixr2 X1 X0) \Rightarrow (\forall X2. (m1_matrix_1 \\ & X2 k1_numbers X0 X0) \Rightarrow ((X2 = k7_matrixr2 X0 X1) \Leftrightarrow ((k1_matrixr2 X0 \\ & X2 X1 = k4_matrixr2 X0) \wedge (k1_matrixr2 X0 X1 X2 = k4_matrixr2 X0)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v6_membered X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\ & (v7_ordinal1 X1)) \end{aligned} \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. (m2_finseq_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2. (m2_finseq_1 X2 k1_numbers) \Rightarrow (\forall X3. \\ & (m1_matrix_1 X3 k1_numbers X0 X0) \Rightarrow (((v1_matrixr2 X3 X0) \wedge (k3_finseq_1 \\ & X1 = X0) \wedge (k3_finseq_1 X2 = X0))) \Rightarrow ((k12_matrixr1 X3 X1 = X2) \Leftrightarrow (X1 = \\ & k12_matrixr1 (k7_matrixr2 X0 X3) X2)))))) \end{aligned}$$