

t60_matrixr1
(TMPGcECwZuDnSaciebghcTKjDQdrj2THbEn)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ 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 $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k12_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2.((v1_matrix_1 X2) \wedge (m2_finseq_1 X2 \\ & (k3_finseq_2 k1_numbers))) \Rightarrow ((k1_matrix_1 X2 = k3_finseq_1 X1) \Rightarrow \\ & ((r1_xxreal_0 (k3_finseq_1 X1) k6_numbers) \vee (k11_matrixr1 X2 \\ & (k10_rvsum_1 X1 X0) = k10_rvsum_1 (k11_matrixr1 X2 X1) X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.((v1_matrix_1 \\ & X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 k1_numbers))) \Rightarrow (\neg(\neg(r1_xxreal_0 \\ & (k3_finseq_1 X1) k6_numbers) \wedge (\neg(r1_xxreal_0 (k1_matrix_1 X1) \\ & k6_numbers) \wedge (((k3_finseq_1 X1 = k3_finseq_1 X0) \vee (k1_matrix_1 \\ & (k4_matrix_1 k1_numbers X1) = k3_finseq_1 X0)) \wedge (k11_matrixr1 \\ & (k4_matrix_1 k1_numbers X1) X0 \neq k12_matrixr1 X1 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 \\ & X1) \wedge ((v3_valued_0 X1) \wedge (v1_finseq_1 X1)))) \Rightarrow (k3_finseq_1 (k10_rvsum_1 \\ & X1 X0) = k3_finseq_1 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_matrix_1 X1) \wedge \\ (m2_finseq_1 X1 (k3_finseq_2 X0))) \Rightarrow ((\neg r1_xreal_0 (k1_matrix_1 \\ X1) k6_numbers) \Rightarrow ((k3_finseq_1 (k4_matrix_1 X0 X1) = k1_matrix_1 \\ X1) \wedge (k1_matrix_1 (k4_matrix_1 X0 X1) = k3_finseq_1 X1)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (5)$$

Assume the following.

$$v3_membered k1_numbers \quad (6)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m2_finseq_1 X1 X0) \Rightarrow ((v1_funct_1 X1) \wedge (\\ (v1_finseq_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ X0)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge (\\ (v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((v1_matrix_1 X1) \wedge \\ (m1_finseq_1 X1 (k3_finseq_2 X0)))) \Rightarrow ((v1_matrix_1 (k4_matrix_1 \\ X0 X1)) \wedge (m2_finseq_1 (k4_matrix_1 X0 X1) (k3_finseq_2 X0))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (\\ v3_valued_0 X0) \wedge (v1_finseq_1 X0)))) \wedge (v1_xreal_0 X1) \Rightarrow (m2_finseq_1 \\ (k10_rsum_1 X0 X1) k1_numbers) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(v3_membered X1) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v3_valued_0 X2)) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.(v3_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow \\ (v1_xreal_0 X1)) \end{aligned} \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2.((v1_matrix_1 X2) \wedge (m2_finseq_1 X2 \\ & (k3_finseq_2 k1_numbers)))) \Rightarrow ((k3_finseq_1 X2 = k3_finseq_1 X1) \Rightarrow \\ & ((r1_xxreal_0 (k3_finseq_1 X1) k6_numbers) \vee ((r1_xxreal_0 (k1_matrix_1 \\ & X2) k6_numbers) \vee (k12_matrixr1 X2 (k10_rvsum_1 X1 X0) = k10_rvsum_1 \\ & (k12_matrixr1 X2 X1) X0)))))) \end{aligned}$$