

t55_matrixc1

(TMMKQs9DyFjxad7NjVNyLvN1tzjJ8KFKkKG)

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Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ 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 $k15_complex1 : \iota \Rightarrow \iota$ be given. Let $k8_complsp2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_complsp2 : \iota \Rightarrow \iota$ be given. Let $k17_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k5_matrixc1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k9_matrix_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k2_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ X1 k2_numbers) \Rightarrow (k8_complsp2 X0 X1 = k15_complex1 (k8_complsp2 \\ X1 X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k2_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ X1 k2_numbers) \Rightarrow ((k3_finseq_1 X0 = k3_finseq_1 X1) \Rightarrow (k8_complsp2 \\ X0 X1 = k17_rvsum_1 (k5_matrixc1 X0 (k1_complsp2 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(m2_finseq_1 X0 k2_numbers) \Rightarrow (k1_complsp2 (k1_complsp2 X0) = X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{4}$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k2_numbers) \Rightarrow (m2_finseq_1 (k1_complsp2 X0) k2_numbers) \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k2_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ & X1 k2_numbers) \Rightarrow ((X1 = k1_complsp2 X0) \Leftrightarrow ((k3_finseq_1 X1 = k3_finseq_1 \\ & X0) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (((r1_xxreal_0 np_1 X2) \wedge (\\ & r1_xxreal_0 X2 (k3_finseq_1 X0))) \Rightarrow (k9_matrix_5 X1 X2 = k15_complex1 \\ & (k9_matrix_5 X0 X2))))))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((m1_finseq_1 X0 k2_numbers) \wedge (m1_finseq_1 X1 k2_numbers)) \Rightarrow (k5_matrixc1 X0 X1 = k5_matrixc1 X1 X0) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k2_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ & X1 k2_numbers) \Rightarrow ((k3_finseq_1 X0 = k3_finseq_1 X1) \Rightarrow ((r1_xxreal_0 \\ & (k3_finseq_1 X1) k6_numbers) \vee (k15_complex1 (k8_complsp2 X0 X1) = \\ & k8_complsp2 (k1_complsp2 X0) (k1_complsp2 X1)))))) \end{aligned}$$