

t10_matrix_5 (TMM- TaXC8GFevGK9mFMxMahb2gi2ncnYYJyr)

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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 $k2_numbers : \iota$ be given. Let $k7_matrix_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v33_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_matrix_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_group_1 : \iota \Rightarrow \iota$ be given. Let $k1_complfld : \iota$ be given. Let $k6_complex1 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_vectsp_1 : \iota \Rightarrow o$ be given. Let $v6_vectsp_1 : \iota \Rightarrow o$ be given. Let $k1_matrix_5 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k2_matrix_5 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ & X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ & (v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v4_vectsp_1 \\ & X0) \wedge ((v5_vectsp_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (\forall X1. \\ & ((v1_matrix_1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 (u1_struct_0 \\ & X0)))) \Rightarrow (k6_matrix_3 X0 X1 (k1_group_1 X0) = X1)) \end{aligned} \quad (1)$$

Assume the following.

$$k1_group_1 k1_complfld = k6_complex1 \quad (2)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & (\neg v6_struct_0 \ k1_complfld) \wedge ((v13_algstr_0 \ k1_complfld) \wedge ((\\ & \quad v33_algstr_0 \ k1_complfld) \wedge ((v36_algstr_0 \ k1_complfld) \wedge ((v3_group_1 \\ & \quad k1_complfld) \wedge ((v5_group_1 \ k1_complfld) \wedge ((v3_vectsp_1 \ k1_complfld) \wedge \\ & \quad ((v5_vectsp_1 \ k1_complfld) \wedge ((v6_vectsp_1 \ k1_complfld) \wedge ((v2_rlvect_1 \\ & \quad k1_complfld) \wedge ((v3_rlvect_1 \ k1_complfld) \wedge (v4_rlvect_1 \ k1_complfld)))))))))) \\ & \hspace{15em} (5) \end{aligned}$$

Assume the following.

$$(v36_algstr_0 \ k1_complfld) \wedge (v4_vectsp_1 \ k1_complfld) \quad (6)$$

Assume the following.

$$(\neg v2_struct_0 \ k1_complfld) \wedge (v36_algstr_0 \ k1_complfld) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_matrix_1 \ X0) \wedge (m1_finseq_1 \ X0 \ (k3_finseq_2 \ k2_numbers))) \Rightarrow \\ & \quad ((v1_matrix_1 \ (k1_matrix_5 \ X0)) \wedge (m2_finseq_1 \ (k1_matrix_5 \ X0) \\ & \quad (k3_finseq_2 \ (u1_struct_0 \ k1_complfld)))) \\ & \hspace{15em} (8) \end{aligned}$$

Assume the following.

$$(v36_algstr_0 \ k1_complfld) \wedge (l6_algstr_0 \ k1_complfld) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (\forall X1.((v1_matrix_1 \ X1) \wedge (\\ & \quad m2_finseq_1 \ X1 \ (k3_finseq_2 \ k2_numbers))) \Rightarrow (\forall X2.((v1_matrix_1 \\ & \quad X2) \wedge (m2_finseq_1 \ X2 \ (k3_finseq_2 \ k2_numbers))) \Rightarrow ((X2 = k7_matrix_5 \\ & \quad X0 \ X1) \Leftrightarrow (\forall X3.(m1_subset_1 \ X3 \ (u1_struct_0 \ k1_complfld)) \Rightarrow \\ & \quad ((X3 = X0) \Rightarrow (X2 = k2_matrix_5 \ (k6_matrix_3 \ k1_complfld \ (k1_matrix_5 \\ & \quad X1 \ X3)))))) \\ & \hspace{15em} (10) \end{aligned}$$

Assume the following.

$$k6_complex1 = np_1 \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_matrix_1 \ X0) \wedge (m2_finseq_1 \ X0 \ (k3_finseq_2 \ (u1_struct_0 \\ & \quad k1_complfld)))) \Rightarrow (k2_matrix_5 \ X0 = X0) \\ & \hspace{15em} (12) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_matrix_1 \ X0) \wedge (m2_finseq_1 \ X0 \ (k3_finseq_2 \ k2_numbers))) \Rightarrow \\ & \quad (k1_matrix_5 \ X0 = X0) \\ & \hspace{15em} (13) \end{aligned}$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xcmplx_0 \ X0) \quad (14)$$

Theorem 1

$$\forall X0.((v1_matrix_1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 k2_numbers))) \Rightarrow (k7_matrix_5 np_1 X0 = X0)$$