

t13_matrix16 (TMHfDTvyxNinYr- teEDBbFJCjdYWsNab4deU)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ 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 $m1_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_matrix16 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_matrix_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_matrix13 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((\neg v2_struct_0 \\ & X1) \wedge ((\neg v6_struct_0 X1) \wedge ((v13_algstr_0 X1) \wedge ((v33_algstr_0 X1) \wedge \\ & ((v3_group_1 X1) \wedge ((v5_group_1 X1) \wedge ((v2_rlvect_1 X1) \wedge ((v3_rlvect_1 \\ & X1) \wedge ((v4_rlvect_1 X1) \wedge ((v4_vectsp_1 X1) \wedge ((v5_vectsp_1 X1) \wedge \\ & (l6_algstr_0 X1)))))))))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ & X1)) \Rightarrow (\forall X3.(m1_matrix_1 X3 (u1_struct_0 X1) X0 X0) \Rightarrow ((v1_matrix16 \\ & X3 (u1_struct_0 X1)) \Rightarrow (v1_matrix16 (k2_matrix13 X0 X0 X1 X3 X2) (\\ & u1_struct_0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((\neg v2_struct_0 \\ & X1) \wedge ((\neg v6_struct_0 X1) \wedge ((v13_algstr_0 X1) \wedge ((v33_algstr_0 X1) \wedge \\ & ((v3_group_1 X1) \wedge ((v5_group_1 X1) \wedge ((v2_rlvect_1 X1) \wedge ((v3_rlvect_1 \\ & X1) \wedge ((v4_rlvect_1 X1) \wedge ((v4_vectsp_1 X1) \wedge ((v5_vectsp_1 X1) \wedge \\ & (l6_algstr_0 X1)))))))))) \Rightarrow (\forall X2.(m1_matrix_1 X2 (u1_struct_0 \\ & X1) X0 X0) \Rightarrow (\forall X3.(m1_matrix_1 X3 (u1_struct_0 X1) X0 X0) \Rightarrow \\ & (((v1_matrix16 X2 (u1_struct_0 X1)) \wedge (v1_matrix16 X3 (u1_struct_0 \\ & X1))) \Rightarrow (v1_matrix16 (k3_matrix_6 X0 X1 X2 X3) (u1_struct_0 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v7_ordinal1 \\
& X0) \wedge ((v7_ordinal1 X1) \wedge (((\neg v2_struct_0 X2) \wedge ((\neg v6_struct_0 X2) \wedge \\
& ((v13_algstr_0 X2) \wedge ((v33_algstr_0 X2) \wedge ((v3_group_1 X2) \wedge ((v5_group_1 \\
& X2) \wedge ((v2_rlvect_1 X2) \wedge ((v3_rlvect_1 X2) \wedge ((v4_rlvect_1 X2) \wedge \\
& ((v4_vectsp_1 X2) \wedge ((v5_vectsp_1 X2) \wedge (l6_algstr_0 X2)))))))))) \wedge \\
& ((m1_matrix_1 X3 (u1_struct_0 X2) X0 X1) \wedge (m1_subset_1 X4 (u1_struct_0 \\
& X2)))))) \Rightarrow (m1_matrix_1 (k2_matrix13 X0 X1 X2 X3 X4) (u1_struct_0 \\
& X2) X0 X1)
\end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. ((\neg v2_struct_0 \\
& X1) \wedge ((\neg v6_struct_0 X1) \wedge ((v13_algstr_0 X1) \wedge ((v33_algstr_0 X1) \wedge \\
& ((v3_group_1 X1) \wedge ((v5_group_1 X1) \wedge ((v2_rlvect_1 X1) \wedge ((v3_rlvect_1 \\
& X1) \wedge ((v4_rlvect_1 X1) \wedge ((v4_vectsp_1 X1) \wedge ((v5_vectsp_1 X1) \wedge \\
& (l6_algstr_0 X1)))))))))) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 \\
& X1)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X1)) \Rightarrow (\forall X4. \\
& (m1_matrix_1 X4 (u1_struct_0 X1) X0 X0) \Rightarrow (\forall X5. (m1_matrix_1 \\
& X5 (u1_struct_0 X1) X0 X0) \Rightarrow (((v1_matrix16 X4 (u1_struct_0 X1)) \wedge \\
& (v1_matrix16 X5 (u1_struct_0 X1)) \Rightarrow (v1_matrix16 (k3_matrix_6 \\
& X0 X1 (k2_matrix13 X0 X0 X1 X4 X2) (k2_matrix13 X0 X0 X1 X5 X3)) (u1_struct_0 \\
& X1)))))))))
\end{aligned}$$