

t3_parsp_1

(TMY9XzfMRB4SrD3cdkCtkTjapmTHmJeP9du)

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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 $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ 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 $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_parsp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k3_parsp_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\
 & X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge (\\
 & (v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\
 & X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow ((v1_funct_1 \\
 & (k3_parsp_1 X0)) \wedge ((v1_funct_2 (k3_parsp_1 X0) (k3_zfmisc_1 (\\
 & u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0)) (k3_zfmisc_1 \\
 & (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0))) \wedge (m1_subset_1 \\
 & (k3_parsp_1 X0) (k1_zfmisc_1 (k2_zfmisc_1 (k3_zfmisc_1 (u1_struct_0 \\
 & X0) (u1_struct_0 X0) (u1_struct_0 X0)) (k3_zfmisc_1 (u1_struct_0 \\
 & X0) (u1_struct_0 X0) (u1_struct_0 X0))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\
& X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge (\\
& (v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\
& X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0))) \Rightarrow (k4_parsp_1 X0 X1 = k3_funct_2 (k3_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0)) (k3_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0)) (k3_parsp_1 \\
& X0) X1)) \tag{2}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\
& X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge (\\
& (v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\
& X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (\forall X1. \\
& ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k3_zfmisc_1 (u1_struct_0 X0) \\
& (u1_struct_0 X0) (u1_struct_0 X0)) (k3_zfmisc_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0))) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k2_zfmisc_1 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) (\\
& u1_struct_0 X0)) (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0)))))) \Rightarrow ((X1 = k3_parsp_1 X0) \Leftrightarrow (\forall X2.(m1_subset_1 \\
& X2 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0))) \Rightarrow (k3_funct_2 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0) (u1_struct_0 X0)) (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0) (u1_struct_0 X0)) X1 X2 = k4_domain_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0) (u1_struct_0 X0) (k4_algstr_0 X0 (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X2)) (k4_algstr_0 X0 (k2_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X2)) (k4_algstr_0 \\
& X0 (k3_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0) X2)))))) \tag{3}
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\
& X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge (\\
& (v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\
& X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0))) \Rightarrow (k4_parsp_1 X0 X1 = k4_domain_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) (k4_algstr_0 X0 (k1_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X1)) (k4_algstr_0 \\
& X0 (k2_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0) X1)) (k4_algstr_0 X0 (k3_mcart_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0) (u1_struct_0 X0) X1))))
\end{aligned}$$