

t8_parsp_1
(TMbBq6BhYSe2B1Pomz3pAFDxatHCFFTDUk6)

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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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k9_parsp_1 : \iota \Rightarrow \iota$ be given. Let $k5_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_parsp_1 : \iota \Rightarrow \iota$ be given. Let $k6_parsp_1 : \iota \Rightarrow \iota$ be given. Let $k3_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_group_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_parsp_1 : \iota \Rightarrow \iota$ 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 (\forall X1. \\
& (X1 = k7_parsp_1 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow ((X2 \in k6_parsp_1 X0) \wedge \\
& (\exists X3.(m1_subset_1 X3 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0) (u1_struct_0 X0))) \wedge (\exists X4.(m1_subset_1 X4 (k3_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0))) \wedge (\exists X5. \\
& (m1_subset_1 X5 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0))) \wedge (\exists X6.(m1_subset_1 X6 (k3_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0)))))) \wedge ((X2 = k5_domain_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)) \\
& (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))) \\
& X3 X4 X5 X6) \wedge ((k5_algstr_0 X0 (k8_group_1 X0 (k5_algstr_0 X0 (k1_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X3) (k1_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X4)) (k5_algstr_0 \\
& X0 (k2_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0) X5) (k2_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0) X6))) (k8_group_1 X0 (k5_algstr_0 X0 (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6)) (k5_algstr_0 X0 (k2_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X3) (k2_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X4))) = k4_struct_0 \\
& X0) \wedge ((k5_algstr_0 X0 (k8_group_1 X0 (k5_algstr_0 X0 (k1_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X3) (k1_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X4)) (k5_algstr_0 \\
& X0 (k3_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0) X5) (k3_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0) X6))) (k8_group_1 X0 (k5_algstr_0 X0 (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6)) (k5_algstr_0 X0 (k3_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X3) (k3_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X4))) = k4_struct_0 \\
& X0) \wedge (k5_algstr_0 X0 (k8_group_1 X0 (k5_algstr_0 X0 (k2_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X3) (k2_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X4)) (k5_algstr_0 \\
& X0 (k3_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0) X5) (k3_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\
& X0) X6))) (k8_group_1 X0 (k5_algstr_0 X0 (k2_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k2_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6)) (k5_algstr_0 X0 (k3_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X3) (k3_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X4))) = k4_struct_0 \\
& X0))))))))))
\end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge (\\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (k8_parsp_1 \\ &X0 = k7_parsp_1 X0) \end{aligned} \quad (2)$$

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 (u1_struct_0 (k9_parsp_1 X0))) \Rightarrow (\forall X2. (\\
& m1_subset_1 X2 (u1_struct_0 (k9_parsp_1 X0))) \Rightarrow (\forall X3. (m1_subset_1 \\
& X3 (u1_struct_0 (k9_parsp_1 X0))) \Rightarrow (\forall X4. (m1_subset_1 X4 \\
& (u1_struct_0 (k9_parsp_1 X0))) \Rightarrow ((k5_domain_1 (u1_struct_0 (\\
& k9_parsp_1 X0)) (u1_struct_0 (k9_parsp_1 X0)) (u1_struct_0 (k9_parsp_1 \\
& X0)) (u1_struct_0 (k9_parsp_1 X0)) X1 X2 X3 X4 \in k8_parsp_1 X0) \Leftrightarrow (\\
& (k5_domain_1 (u1_struct_0 (k9_parsp_1 X0)) (u1_struct_0 (k9_parsp_1 \\
& X0)) (u1_struct_0 (k9_parsp_1 X0)) (u1_struct_0 (k9_parsp_1 X0)) \\
& X1 X2 X3 X4 \in k6_parsp_1 X0) \wedge (\exists X5. (m1_subset_1 X5 (k3_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0))) \wedge (\exists X6. \\
& (m1_subset_1 X6 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0))) \wedge (\exists X7. (m1_subset_1 X7 (k3_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0))) \wedge (\exists X8. \\
& (m1_subset_1 X8 (k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0))) \wedge ((k5_domain_1 (u1_struct_0 (k9_parsp_1 X0)) \\
& (u1_struct_0 (k9_parsp_1 X0)) (u1_struct_0 (k9_parsp_1 X0)) (\\
& u1_struct_0 (k9_parsp_1 X0)) X1 X2 X3 X4 = k5_domain_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)) (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)) X5 X6 X7 X8) \wedge \\
& ((k5_algstr_0 X0 (k8_group_1 X0 (k5_algstr_0 X0 (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6)) (k5_algstr_0 X0 (k2_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X7) (k2_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X8))) (k8_group_1 \\
& X0 (k5_algstr_0 X0 (k1_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0) X7) (k1_mcart_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0) (u1_struct_0 X0) X8)) (k5_algstr_0 X0 (k2_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k2_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6))) = k4_struct_0 X0) \wedge (\\
& (k5_algstr_0 X0 (k8_group_1 X0 (k5_algstr_0 X0 (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k1_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6)) (k5_algstr_0 X0 (k3_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X7) (k3_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X8))) (k8_group_1 \\
& X0 (k5_algstr_0 X0 (k1_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0) X7) (k1_mcart_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0) (u1_struct_0 X0) X8)) (k5_algstr_0 X0 (k3_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k3_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6))) = k4_struct_0 X0) \wedge (\\
& k5_algstr_0 X0 (k8_group_1 X0 (k5_algstr_0 X0 (k2_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k2_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6)) (k5_algstr_0 X0 (k3_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X7) (k3_mcart_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 X0) X8))) (k8_group_1 \\
& X0 (k5_algstr_0 X0 (k2_mcart_1 (u1_struct_0 X0) (u1_struct_0 X0) \\
& (u1_struct_0 X0) X7) (k2_mcart_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0) (u1_struct_0 X0) X8)) (k5_algstr_0 X0 (k3_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X5) (k3_mcart_1 (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_struct_0 X0) X6))) = k4_struct_0 X0)))))))))
\end{aligned}$$