

t5_ndiff_3

(TMQzg7X7Pm mkhHLfeYDenJzqrBtuCAe8Zpx)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ 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 $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_normsp_0 : \iota \Rightarrow o$ be given. Let $v4_normsp_0 : \iota \Rightarrow o$ be given. Let $v2_normsp_1 : \iota \Rightarrow o$ be given. Let $l1_normsp_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_vfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_normsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_vfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$

be given. Let $k3_normsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge ((v3_normsp_0 \\
& X0) \wedge ((v4_normsp_0 X0) \wedge ((v2_normsp_1 X0) \wedge (l1_normsp_1 X0)))))))))) \Rightarrow \\
& (\forall X1.((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k1_numbers (u1_struct_0 X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers (u1_struct_0 \\
& X0)))))) \Rightarrow (\forall X3.((v1_funct_1 X3) \wedge ((v1_funct_2 X3 k5_numbers \\
& k1_numbers) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\
& k1_numbers)))))) \Rightarrow ((r1_tarski (k2_relset_1 k1_numbers X3) (k9_subset_1 \\
& k1_numbers (k1_relset_1 k1_numbers X1) (k1_relset_1 k1_numbers \\
& X2))) \Rightarrow ((r2_funct_2 k5_numbers (u1_struct_0 X0) (k8_funct_2 k5_numbers \\
& (u1_struct_0 X0) k1_numbers X3 (k6_vfunct_1 k1_numbers X0 X1 X2)) \\
& (k2_normsp_1 X0 (k8_funct_2 k5_numbers (u1_struct_0 X0) k1_numbers \\
& X3 X1) (k8_funct_2 k5_numbers (u1_struct_0 X0) k1_numbers X3 X2))) \wedge \\
& (r2_funct_2 k5_numbers (u1_struct_0 X0) (k8_funct_2 k5_numbers \\
& (u1_struct_0 X0) k1_numbers X3 (k2_vfunct_1 k1_numbers X0 X1 X2)) \\
& (k3_normsp_1 X0 (k8_funct_2 k5_numbers (u1_struct_0 X0) k1_numbers \\
& X3 X1) (k8_funct_2 k5_numbers (u1_struct_0 X0) k1_numbers X3 X2))))))))) \\
& \tag{1}
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v13_algstr_0 \\
& X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge \\
& ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 \\
& X0) \wedge ((v3_normsp_0 X0) \wedge ((v4_normsp_0 X0) \wedge ((v2_normsp_1 X0) \wedge \\
& (l1_normsp_1 X0)))))))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers (u1_struct_0 \\
& X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\
& (k2_zfmisc_1 k1_numbers (u1_struct_0 X0)))))) \Rightarrow (\forall X3.((\\
& v1_funct_1 X3) \wedge ((v1_funct_2 X3 k5_numbers k1_numbers) \wedge (m1_subset_1 \\
& X3 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow ((r1_tarski \\
& (k2_relset_1 k1_numbers X3) (k9_subset_1 k1_numbers (k1_relset_1 \\
& k1_numbers X1) (k1_relset_1 k1_numbers X2))) \Rightarrow ((r2_funct_2 k5_numbers \\
& (u1_struct_0 X0) (k8_funct_2 k5_numbers (u1_struct_0 X0) k1_numbers \\
& X3 (k6_vfunct_1 k1_numbers X0 X1 X2)) (k2_normsp_1 X0 (k8_funct_2 \\
& k5_numbers (u1_struct_0 X0) k1_numbers X3 X1) (k8_funct_2 k5_numbers \\
& (u1_struct_0 X0) k1_numbers X3 X2))) \wedge (r2_funct_2 k5_numbers (\\
& u1_struct_0 X0) (k8_funct_2 k5_numbers (u1_struct_0 X0) k1_numbers \\
& X3 (k2_vfunct_1 k1_numbers X0 X1 X2)) (k3_normsp_1 X0 (k8_funct_2 \\
& k5_numbers (u1_struct_0 X0) k1_numbers X3 X1) (k8_funct_2 k5_numbers \\
& (u1_struct_0 X0) k1_numbers X3 X2)))))))))
\end{aligned}$$