

t4_sfmastr2
(TMZTCHQCZF93oV3UJhAPV2VYCPjuK2AVgLv)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_scmf_sa_2 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v5_funct_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_afinsq_1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_scmf_sa_2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $r5_scmf_sa7b : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_scmf_sa_m : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 \\
& X0 (u1_compos_1 k1_scmf_sa_2)) \wedge ((v1_funct_1 X0) \wedge (v1_partfun1 \\
& X0 k5_numbers)))) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v4_relat_1 \\
& X1 (u1_struct_0 k1_scmf_sa_2)) \wedge ((v1_funct_1 X1) \wedge ((v5_funct_1 \\
& X1 (k2_memstr_0 np_3 k1_scmf_sa_2)) \wedge (v1_partfun1 X1 (u1_struct_0 \\
& k1_scmf_sa_2)))) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge ((v1_relat_1 \\
& X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 (u1_compos_1 \\
& k1_scmf_sa_2)) \wedge ((v1_funct_1 X2) \wedge ((v1_finset_1 X2) \wedge (v1_afinsq_1 \\
& X2)))))) \Rightarrow ((k1_funct_1 X1 (k4_scmf_sa_2 k6_numbers) = np_1) \Rightarrow \\
& ((r5_scmf_sa7b X2 X1 X0) \Leftrightarrow (r5_scmf_sa7b X2 (k1_scmf_sa_m X1) X0))))))
\end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 (u1_struct_0 k1_scmf_sa_2)) \wedge \\
& ((v1_funct_1 X0) \wedge ((v5_funct_1 X0 (k2_memstr_0 np_3 k1_scmf_sa_2)) \wedge \\
& (v1_partfun1 X0 (u1_struct_0 k1_scmf_sa_2)))))) \Rightarrow (\forall X1. \\
& ((v1_relat_1 X1) \wedge ((v4_relat_1 X1 k5_numbers) \wedge ((v5_relat_1 X1 \\
& (u1_compos_1 k1_scmf_sa_2)) \wedge ((v1_funct_1 X1) \wedge (v1_partfun1 X1 \\
& k5_numbers)))) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge ((v1_relat_1 \\
& X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 (u1_compos_1 \\
& k1_scmf_sa_2)) \wedge ((v1_funct_1 X2) \wedge ((v1_finset_1 X2) \wedge (v1_afinsq_1 \\
& X2)))))) \Rightarrow ((k1_funct_1 X0 (k4_scmf_sa_2 k6_numbers) = np_1) \Rightarrow \\
& ((r5_scmf_sa7b X2 X0 X1) \Leftrightarrow (r5_scmf_sa7b X2 (k1_scmf_sa_m X0) X1))))))
\end{aligned}$$