

t30_scmfsa_m (TMJ- yNX1GXmbPyo1Wd286hy6jQfVRpkEojfK)

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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 $k1_scmfsa_2 : \iota$ 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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_scmfsa_2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((\\ v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((r1_tarski X0 X1) \Leftrightarrow ((r1_tarski \\ (k9_xtuple_0 X0) (k9_xtuple_0 X1)) \wedge (\forall X2.(X2 \in k9_xtuple_0 \\ X0) \Rightarrow (k1_funct_1 X0 X2 = k1_funct_1 X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.(r1_tarski X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge (v1_funct_1 X1))) \quad (2)$$

Assume the following.

$$k1_funct_1 (k8_memstr_0 np_3 k1_scmfsa_2 (k16_funcop_1 (k4_scmfsa_2 k6_numbers) np_1)) (k4_scmfsa_2 k6_numbers) = np_1 \quad (3)$$

Assume the following.

$$k4_scmfsa_2 k6_numbers \in k9_xtuple_0 (k8_memstr_0 np_3 k1_scmfsa_2 (k16_funcop_1 (k4_scmfsa_2 k6_numbers) np_1)) \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 (u1_struct_0 k1_scmfsa_2)) \wedge \\ ((v1_funct_1 X0) \wedge ((v5_funct_1 X0 (k2_memstr_0 np_3 k1_scmfsa_2)) \wedge \\ (v1_partfun1 X0 (u1_struct_0 k1_scmfsa_2)))))) \Rightarrow ((r1_tarski \\ (k8_memstr_0 np_3 k1_scmfsa_2 (k16_funcop_1 (k4_scmfsa_2 k6_numbers) \\ np_1)) X0) \Rightarrow (k1_funct_1 X0 (k4_scmfsa_2 k6_numbers) = np_1)) \end{aligned}$$