

t31_memstr_0
(TMMLDBc8cyQCT7nRzH5TEyjgY6jPgkxCBC2)

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Let $v1_setfam.1 : \iota \Rightarrow o$ be given. Let $v2_struct.0 : \iota \Rightarrow o$ be given. Let $v2_memstr.0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_memstr.0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_memstr.0 : \iota \Rightarrow \iota \Rightarrow o$ be given. 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 $v1_funct.1 : \iota \Rightarrow o$ 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 $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct.4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_memstr.0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_memstr.0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1_relat.1 X0) \wedge (v1_funct.1 X0)) \Rightarrow (\forall X1.((v1_relat.1 X1) \wedge (v1_funct.1 X1)) \Rightarrow ((r1_tarski X0 X1) \Rightarrow (k1_funct.4 X1 X0 = X1))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset.1 X0 (k1_zfmisc.1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_setfam.1 X0) \Rightarrow (\forall X1. ((\neg v2_struct.0 X1) \wedge \\ & ((v2_memstr.0 X1 X0) \wedge ((v3_memstr.0 X1 X0) \wedge (l1_memstr.0 X1 X0)))) \Rightarrow \\ & (\forall X2. ((v1_relat.1 X2) \wedge ((v4_relat.1 X2 (u1_struct.0 X1)) \wedge \\ & ((v1_funct.1 X2) \wedge ((v5_funct.1 X2 (k2_memstr.0 X0 X1)) \wedge (v1_partfun1 \\ & X2 (u1_struct.0 X1)))))) \Rightarrow (r1_tarski (k7_memstr.0 X0 X1 (k5_memstr.0 \\ & X0 X1 X2)) X2))) \quad (3) \end{aligned}$$

Assume the following.

$$\forall X0. ((v1_relat.1 X0) \wedge (v1_funct.1 X0)) \Rightarrow (\forall X1. (m1_subset.1 X1 (k1_zfmisc.1 X0)) \Rightarrow (v1_funct.1 X1)) \quad (4)$$

Assume the following.

$$\forall X0. (v1_relat.1 X0) \Rightarrow (\forall X1. (m1_subset.1 X1 (k1_zfmisc.1 X0)) \Rightarrow (v1_relat.1 X1)) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_setfam_1 X0) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge \\ & ((v2_memstr_0 X1 X0) \wedge (v3_memstr_0 X1 X0) \wedge (l1_memstr_0 X1 X0)))) \Rightarrow \\ & (\forall X2.((v1_relat_1 X2) \wedge (v4_relat_1 X2 (u1_struct_0 X1)) \wedge \\ & ((v1_funct_1 X2) \wedge (v5_funct_1 X2 (k2_memstr_0 X0 X1)) \wedge (v1_partfun1 \\ & X2 (u1_struct_0 X1)))))) \Rightarrow (k1_funct_4 X2 (k7_memstr_0 X0 X1 (k5_memstr_0 \\ & X0 X1 X2)) = X2)) \end{aligned}$$