

t6_memstr_0 (TMVu- jUU8K4hBEJx2oiTke9P3pG8nMhJ2RN5)

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Let $v1_setfam_1 : \iota \Rightarrow o$ 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 $v4_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k8_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_xboole_0 X0 X2)) \Rightarrow (r1_tarski X0 (k4_xboole_0 X1 X2)) \quad (1)$$

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.

$$\forall X0. \forall X1. \forall X2. (r1_tarski X0 (k4_xboole_0 X1 X2)) \Rightarrow ((r1_tarski X0 X1) \wedge (r1_xboole_0 X0 X2)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k7_subset_1 X0 X1 X2 = k4_xboole_0 X1 X2) \quad (5)$$

Assume the following.

$$\forall X0. (l2_struct_0 X0) \Rightarrow (l1_struct_0 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(l1_memstr_0 X1 X0)\Rightarrow(l2_struct_0 X1) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_setfam_1 X0)\Rightarrow(\forall X1.(l1_memstr_0 X1 X0)\Rightarrow \\ (\forall X2.((v1_relat_1 X2)\wedge((v4_relat_1 X2 (u1_struct_0 X1))\wedge \\ ((v1_funct_1 X2)\wedge(v5_funct_1 X2 (k2_memstr_0 X0 X1))))))\Rightarrow((v4_memstr_0 \\ X2 X0 X1)\Leftrightarrow(r1_xboole_0 (k9_xtuple_0 X2) (k1_tarski (k4_struct_0 \\ X1)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(l1_struct_0 X0)\Rightarrow(k2_struct_0 X0 = u1_struct_0 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 X1)\Rightarrow((v4_relat_1 X1 X0)\Leftrightarrow(r1_tarski \\ (k9_xtuple_0 X1) X0)) \quad (10)$$

Assume the following.

$$\forall X0.(l2_struct_0 X0)\Rightarrow(k8_struct_0 X0 = k7_subset_1 (u1_struct_0 \\ X0) (k2_struct_0 X0) (k1_tarski (k4_struct_0 X0))) \quad (11)$$

Theorem 1

$$\begin{aligned} \forall X0.(\neg v1_setfam_1 X0)\Rightarrow(\forall X1.(l1_memstr_0 X1 X0)\Rightarrow \\ (\forall X2.((v1_relat_1 X2)\wedge((v4_relat_1 X2 (u1_struct_0 X1))\wedge \\ ((v1_funct_1 X2)\wedge(v5_funct_1 X2 (k2_memstr_0 X0 X1))))))\Rightarrow((v4_memstr_0 \\ X2 X0 X1)\Leftrightarrow(r1_tarski (k9_xtuple_0 X2) (k8_struct_0 X1)))) \end{aligned}$$