

t47_memstr_0 (TMEr- wvjJMC5NLcTqPwXeSbDrKJTGCjmU5Mn)

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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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(\neg v1_setfam_1\ X1) \Rightarrow (\\
& \forall X2.((\neg v2_struct_0\ X2) \wedge ((v2_memstr_0\ X2\ X1) \wedge ((v3_memstr_0 \\
& X2\ X1) \wedge (l1_memstr_0\ X2\ X1)))) \Rightarrow (\forall X3.((v1_relat_1\ X3) \wedge (\\
& (v4_relat_1\ X3\ (u1_struct_0\ X2)) \wedge ((v1_funct_1\ X3) \wedge ((v5_funct_1 \\
& X3\ (k2_memstr_0\ X1\ X2)) \wedge (v1_partfun1\ X3\ (u1_struct_0\ X2)))))) \Rightarrow \\
& (\forall X4.((v1_relat_1\ X4) \wedge ((v4_relat_1\ X4\ (u1_struct_0\ X2)) \wedge \\
& ((v1_funct_1\ X4) \wedge (v5_funct_1\ X4\ (k2_memstr_0\ X1\ X2)))))) \Rightarrow ((r1_tarski \\
& (k1_funct_4\ X4\ (k7_memstr_0\ X1\ X2\ X0))\ X3) \Rightarrow (k5_memstr_0\ X1\ X2\ X3 = \\
& X0))))))
\end{aligned} \tag{1}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{2}$$

Assume the following.

$$v1_xboole_0\ k1_xboole_0 \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_setfam_1\ X0) \Rightarrow (\forall X1.((\neg v2_struct_0\ X1) \wedge \\
& ((v2_memstr_0\ X1\ X0) \wedge ((v3_memstr_0\ X1\ X0) \wedge (l1_memstr_0\ X1\ X0)))) \Rightarrow \\
& (\forall X2.((v1_relat_1\ X2) \wedge ((v4_relat_1\ X2\ (u1_struct_0\ X1)) \wedge \\
& ((v1_funct_1\ X2) \wedge (v5_funct_1\ X2\ (k2_memstr_0\ X0\ X1)))))) \Rightarrow (k8_memstr_0 \\
& X0\ X1\ X2 = k1_funct_4\ X2\ (k7_memstr_0\ X0\ X1\ k6_numbers)))
\end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v7_ordinal1 X0) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_setfam_1 X0) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge \\ & ((v2_memstr_0 X1 X0) \wedge ((v3_memstr_0 X1 X0) \wedge (l1_memstr_0 X1 X0)))) \Rightarrow \\ & (\forall X2.((v1_relat_1 X2) \wedge ((v4_relat_1 X2 (u1_struct_0 X1)) \wedge \\ & ((v1_funct_1 X2) \wedge ((v5_funct_1 X2 (k2_memstr_0 X0 X1)) \wedge (v1_partfun1 \\ & X2 (u1_struct_0 X1)))))) \Rightarrow (\forall X3.((v1_relat_1 X3) \wedge ((v4_relat_1 \\ & X3 (u1_struct_0 X1)) \wedge ((v1_funct_1 X3) \wedge (v5_funct_1 X3 (k2_memstr_0 \\ & X0 X1)))))) \Rightarrow ((r1_tarski (k8_memstr_0 X0 X1 X3) X2) \Rightarrow (k5_memstr_0 \\ & X0 X1 X2 = k6_numbers)))))) \end{aligned}$$