

t62_memstr_0 (TM-
RuLxtabLiGi7p9zQBG8dQuQMoRzphaCHk)

October 27, 2020

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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_setfam_1 X0) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge \\ & ((v2_memstr_0 X1 X0) \wedge ((v3_memstr_0 X1 X0) \wedge (l1_memstr_0 X1 X0)))) \Rightarrow \\ & (\forall X2. ((v1_relat_1 X2) \wedge ((v4_relat_1 X2 (u1_struct_0 X1)) \wedge \\ & ((v1_funct_1 X2) \wedge (v5_funct_1 X2 (k2_memstr_0 X0 X1)))))) \Rightarrow (\forall X3. \\ & (v7_ordinal1 X3) \Rightarrow (k6_memstr_0 X0 X1 (k9_memstr_0 X0 X1 X2 X3) = k6_memstr_0 \\ & X0 X1 X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_setfam_1 X0) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge \\ & ((v2_memstr_0 X1 X0) \wedge ((v3_memstr_0 X1 X0) \wedge (l1_memstr_0 X1 X0)))) \Rightarrow \\ & (\forall X2. ((v1_relat_1 X2) \wedge ((v4_relat_1 X2 (u1_struct_0 X1)) \wedge \\ & ((v1_funct_1 X2) \wedge (v5_funct_1 X2 (k2_memstr_0 X0 X1)))))) \Rightarrow (r1_tarski \\ & (k6_memstr_0 X0 X1 X2) X2)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{4}$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_setfam_1 \ X0) \wedge \\ & (((\neg v2_struct_0 \ X1) \wedge ((v2_memstr_0 \ X1 \ X0) \wedge ((v3_memstr_0 \ X1 \ X0) \wedge \\ & (l1_memstr_0 \ X1 \ X0)))) \wedge (((v1_relat_1 \ X2) \wedge ((v4_relat_1 \ X2 \ (u1_struct_0 \\ & \ X1)) \wedge ((v1_funct_1 \ X2) \wedge (v5_funct_1 \ X2 \ (k2_memstr_0 \ X0 \ X1)))))) \wedge \\ & (v7_ordinal1 \ X3))) \Rightarrow ((v1_relat_1 \ (k9_memstr_0 \ X0 \ X1 \ X2 \ X3)) \wedge (\\ & (v4_relat_1 \ (k9_memstr_0 \ X0 \ X1 \ X2 \ X3) \ (u1_struct_0 \ X1)) \wedge ((v1_funct_1 \\ & (k9_memstr_0 \ X0 \ X1 \ X2 \ X3)) \wedge (v5_funct_1 \ (k9_memstr_0 \ X0 \ X1 \ X2 \ X3) \\ & (k2_memstr_0 \ X0 \ X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (7)$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (8)$$

Assume the following.

$$\forall X0. (v1_xboole_0 \ X0) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)) \Rightarrow (v1_xboole_0 \ X1)) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0. (\neg v1_setfam_1 \ X0) \Rightarrow (\forall X1. ((\neg v2_struct_0 \ X1) \wedge \\ & ((v2_memstr_0 \ X1 \ X0) \wedge ((v3_memstr_0 \ X1 \ X0) \wedge (l1_memstr_0 \ X1 \ X0)))) \Rightarrow \\ & (\forall X2. ((v1_relat_1 \ X2) \wedge ((v4_relat_1 \ X2 \ (u1_struct_0 \ X1)) \wedge \\ & ((v1_funct_1 \ X2) \wedge (v5_funct_1 \ X2 \ (k2_memstr_0 \ X0 \ X1)))))) \Rightarrow (\forall X3. \\ & (m2_subset_1 \ X3 \ k1_numbers \ k5_numbers) \Rightarrow (r1_tarski \ (k6_memstr_0 \\ & \ X0 \ X1 \ X2) \ (k9_memstr_0 \ X0 \ X1 \ X2 \ X3)))))) \end{aligned}$$