

t29_scmfsa_m
(TMaytyJEDzQkMR5xVsnjokSMscCuCtA7Gu2)

October 27, 2020

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 $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_scmf_sa_2 : \iota \Rightarrow \iota$ be given. Let $k7_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k1_scmf_sa_2 : \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v3_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $l1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_compos_1 : \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_setfam_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (k9_xtuple_0 (k2_funcop_1 X0 X1) = X0) \wedge (r1_tarski (k10_xtuple_0 (k2_funcop_1 X0 X1)) (k1_tarski X1)) \quad (1)$$

Assume the following.

$$((v2_xxreal_0 np_3) \wedge (m2_subset_1 np_3 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_3 k5_numbers) \wedge (m1_subset_1 np_3 k1_numbers)) \quad (2)$$

Assume the following.

$$\neg v1_xboole_0 np_3 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k7_funcop_1 X0 X1 = k2_funcop_1 X0 X1 \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (7)$$

Assume the following.

$$(v3_memstr_0 k1_scmfsa_2 np_3) \wedge (v1_extpro_1 k1_scmfsa_2 np_3) \quad (8)$$

Assume the following.

$$(\neg v2_struct_0 k1_scmfsa_2) \wedge ((v2_memstr_0 k1_scmfsa_2 np_3) \wedge (v1_extpro_1 k1_scmfsa_2 np_3)) \quad (9)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (10)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 (k16_funcop_1 X0 X1)) \wedge (v1_funct_1 (k16_funcop_1 X0 X1)) \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. (l1_extpro_1 X1 X0) \Rightarrow ((l1_memstr_0 X1 X0) \wedge (l1_compos_1 X1)) \quad (12)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (13)$$

Assume the following.

$$(v1_extpro_1 k1_scmfsa_2 np_3) \wedge (l1_extpro_1 k1_scmfsa_2 np_3) \quad (14)$$

Assume the following.

$$\forall X0. \forall X1. (((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \wedge ((v1_relat_1 X1) \wedge (v1_funct_1 X1))) \Rightarrow ((v1_relat_1 (k1_funct_4 X0 X1)) \wedge (v1_funct_1 (k1_funct_4 X0 X1))) \quad (15)$$

Assume the following.

$$\forall X0. \forall X1. k16_funcop_1 X0 X1 = k7_funcop_1 (k1_tarSKI X0) X1 \quad (16)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (18)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow (\forall X1.((\\ & \quad v1_relat_1\ X1) \wedge (v1_funct_1\ X1)) \Rightarrow (\forall X2.((v1_relat_1\ X2) \wedge \\ (v1_funct_1\ X2)) \Rightarrow ((X2 = k1_funct_4\ X0\ X1) \Leftrightarrow ((k9_xtuple_0\ X2 = k2_xboole_0 \\ & \quad (k9_xtuple_0\ X0)\ (k9_xtuple_0\ X1)) \wedge (\forall X3.(X3 \in k2_xboole_0 \\ & \quad (k9_xtuple_0\ X0)\ (k9_xtuple_0\ X1)) \Rightarrow (((X3 \in k9_xtuple_0\ X1) \Rightarrow (k1_funct_1 \\ & \quad X2\ X3 = k1_funct_1\ X1\ X3)) \wedge ((\neg X3 \in k9_xtuple_0\ X1) \Rightarrow (k1_funct_1\ X2 \\ & \quad X3 = k1_funct_1\ X0\ X3)))))))))) \end{aligned} \quad (19)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_setfam_1\ X0) \Rightarrow (\forall X1.((\neg v2_struct_0\ X1) \wedge \\ & ((v2_memstr_0\ X1\ X0) \wedge (v3_memstr_0\ X1\ X0) \wedge (l1_memstr_0\ X1\ X0))) \Rightarrow \\ & (\forall X2.(v7_ordinal1\ X2) \Rightarrow (k7_memstr_0\ X0\ X1\ X2 = k16_funcop_1 \\ & \quad (k4_struct_0\ X1)\ X2))) \end{aligned} \quad (20)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1) \Rightarrow (v7_ordinal1\ X0) \quad (21)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0\ X0) \wedge (v7_ordinal1\ X0)) \Rightarrow ((\neg v1_xboole_0\ X0) \wedge ((v7_ordinal1\ X0) \wedge (\neg v1_setfam_1\ X0))) \quad (22)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(m2_subset_1\ X1\ k1_numbers\ k5_numbers) \Rightarrow \\ & (\forall X2.(m2_subset_1\ X2\ k1_numbers\ k5_numbers) \Rightarrow (\forall X3. \\ & (m2_subset_1\ X3\ k1_numbers\ k5_numbers) \Rightarrow (\neg(X0 \in k9_xtuple_0\ (k1_funct_4 \\ & \quad (k16_funcop_1\ (k4_scmfsa_2\ X1)\ X2)\ (k7_memstr_0\ np_3\ k1_scmfsa_2 \\ & \quad X3)))) \wedge ((X0 \neq k4_scmfsa_2\ X1) \wedge (X0 \neq k4_struct_0\ k1_scmfsa_2)))))) \end{aligned}$$