

l4_scm_halt (TMGQvgjomQXFYCrPdFc- Spn2F6eb82ps3RTU)

October 27, 2020

Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k8_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k1_scmf_sa_2 : \iota$ be given. Let $k1_scmf_sa_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_scmf_sa_2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_scmf_sa_m : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ 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 $v2_xxreal_0 : \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_ami_2 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_scmf_sa_m : \iota \Rightarrow o$ 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 $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k1_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_setfam_1 : \iota \Rightarrow o$ be given. Let $k7_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\begin{aligned} & ((v2_xreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0. ((v1_ami_2 \ X0) \wedge (m1_subset_1 \ X0 \ (u1_struct_0 \ k1_scmfsa_2))) \Rightarrow (k4_scmfsa_m \ X0 = k1_tarski \ X0) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_ami_2 \ X0) \wedge (m1_subset_1 \ X0 \ (u1_struct_0 \\ & k1_scmfsa_2))) \wedge (v1_int_1 \ X1)) \Rightarrow (k1_scmfsa_3 \ X0 \ X1 = k16_funcop_1 \\ & X0 \ X1) \end{aligned} \quad (9)$$

Assume the following.

$$(v1_ami_2 \ (k4_scmfsa_2 \ k6_numbers)) \wedge (v1_scmfsa_m \ (k4_scmfsa_2 \ k6_numbers)) \quad (10)$$

Assume the following.

$$(v3_memstr_0 \ k1_scmfsa_2 \ np_3) \wedge (v1_extpro_1 \ k1_scmfsa_2 \ np_3) \quad (11)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (12)$$

Assume the following.

$$\begin{aligned} & (\neg v2_struct_0 \ k1_scmfsa_2) \wedge ((v2_memstr_0 \ k1_scmfsa_2 \ np_3) \wedge \\ & (v1_extpro_1 \ k1_scmfsa_2 \ np_3)) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 \ (k16_funcop_1 \ X0 \ X1)) \wedge (v1_funct_1 \ (k16_funcop_1 \ X0 \ X1)) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(l1_extpro_1 X1 X0)\Rightarrow((l1_memstr_0 X1 X0)\wedge (l1_compos_1 X1)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(v1_funct_1 (k7_funcop_1 X0 X1))\wedge((v1_funct_2 (k7_funcop_1 X0 X1) X0 (k1_tarski X1))\wedge(m1_subset_1 (k7_funcop_1 X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 X0 (k1_tarski X1)))))) \quad (16)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((v1_ami_2 (k4_scmfsa_2 X0))\wedge(m1_subset_1 (k4_scmfsa_2 X0) (u1_struct_0 k1_scmfsa_2))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_ami_2 X0)\wedge(m1_subset_1 X0 (u1_struct_0 k1_scmfsa_2)))\wedge(v1_int_1 X1))\Rightarrow((v1_relat_1 (k1_scmfsa_3 X0 X1))\wedge((v4_relat_1 (k1_scmfsa_3 X0 X1) (u1_struct_0 k1_scmfsa_2))\wedge((v1_funct_1 (k1_scmfsa_3 X0 X1))\wedge((v5_funct_1 (k1_scmfsa_3 X0 X1) (k2_memstr_0 np_3 k1_scmfsa_2))\wedge(v1_finset_1 (k1_scmfsa_3 X0 X1))))))) \quad (18)$$

Assume the following.

$$(v1_extpro_1 k1_scmfsa_2 np_3)\wedge(l1_extpro_1 k1_scmfsa_2 np_3) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_relat_1 X0)\wedge(v1_funct_1 X0))\wedge((v1_relat_1 X1)\wedge(v1_funct_1 X1)))\Rightarrow((v1_relat_1 (k1_funct_4 X0 X1))\wedge(v1_funct_1 (k1_funct_4 X0 X1))) \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.k16_funcop_1 X0 X1 = k7_funcop_1 (k1_tarski X0) X1 \quad (21)$$

Assume the following.

$$\forall X0.(((v1_relat_1 X0)\wedge(v1_funct_1 X0))\Rightarrow(\forall X1.(((v1_relat_1 X1)\wedge(v1_funct_1 X1))\Rightarrow(\forall X2.(((v1_relat_1 X2)\wedge(v1_funct_1 X2))\Rightarrow((X2 = k1_funct_4 X0 X1)\Leftrightarrow((k9_xtuple_0 X2 = k2_xboole_0 (k9_xtuple_0 X0) (k9_xtuple_0 X1))\wedge(\forall X3.(X3 \in k2_xboole_0 (k9_xtuple_0 X0) (k9_xtuple_0 X1))\Rightarrow(((X3 \in k9_xtuple_0 X1)\Rightarrow(k1_funct_1 X2 X3 = k1_funct_1 X1 X3))\wedge((\neg X3 \in k9_xtuple_0 X1)\Rightarrow(k1_funct_1 X2 X3 = k1_funct_1 X0 X3))))))))))) \quad (22)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_setfam_1 X0) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge \\ & ((v2_memstr_0 X1 X0) \wedge ((v3_memstr_0 X1 X0) \wedge (l1_memstr_0 X1 X0)))) \Rightarrow \\ & (\forall X2.((v1_relat_1 X2) \wedge ((v4_relat_1 X2 (u1_struct_0 X1)) \wedge \\ & ((v1_funct_1 X2) \wedge (v5_funct_1 X2 (k2_memstr_0 X0 X1)))))) \Rightarrow (k8_memstr_0 \\ & X0 X1 X2 = k1_funct_4 X2 (k7_memstr_0 X0 X1 k6_numbers))) \end{aligned} \quad (23)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_setfam_1 X0) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge \\ & ((v2_memstr_0 X1 X0) \wedge ((v3_memstr_0 X1 X0) \wedge (l1_memstr_0 X1 X0)))) \Rightarrow \\ & (\forall X2.(v7_ordinal1 X2) \Rightarrow (k7_memstr_0 X0 X1 X2 = k16_funcop_1 \\ & (k4_struct_0 X1) X2))) \end{aligned} \quad (24)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (25)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v7_ordinal1 X0) \quad (26)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (27)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v7_ordinal1 X0)) \Rightarrow ((\neg v1_xboole_0 \\ & X0) \wedge ((v7_ordinal1 X0) \wedge (\neg v1_setfam_1 X0))) \end{aligned} \quad (28)$$

Theorem 1

$$\begin{aligned} & k9_xtuple_0 (k8_memstr_0 np_3 k1_scmf_sa_2 (k1_scmf_sa_3 (k4_scmf_sa_2 \\ & k6_numbers) np_1)) = k2_xboole_0 (k4_scmf_sa_m (k4_scmf_sa_2 k6_numbers)) \\ & (k1_tarSKI (k4_struct_0 k1_scmf_sa_2)) \end{aligned}$$