

l68_scmpds_2 (TMZxRdE- vfG74KAWKqyn8MJQc6cHMwiZt7oa)

October 27, 2020

Let $k8_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_scmpds_2 : \iota$ be given. Let $k2_ami_2 : \iota$ 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 $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k1_ami_2 : \iota$ 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 $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_scm_inst : \iota$ be given. Let $v1_compos_0 : \iota \Rightarrow o$ be given. Let $v2_compos_0 : \iota \Rightarrow o$ be given. Let $v3_compos_0 : \iota \Rightarrow o$ be given. Let $v5_compos_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_card_3 : \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_extpro_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_scmpds_i : \iota$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $l1_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_compos_1 : \iota \Rightarrow o$ be given. Let $k6_scmpds_1 : \iota$ be given. Let $k3_ami_2 : \iota$ be given. Let $k4_ami_2 : \iota$ be given. Let $np_2 : \iota$ be given. Let $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $u2_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $u1_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_extpro_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (r1_xboole_0 X0 X1) \Leftrightarrow (k4_xboole_0 X0 X1 = X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (\neg X0 \in X1) \Rightarrow (r1_xboole_0 (k1_tarski X0) X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k4_xboole_0 (k2_xboole_0 X0 X1) X1 = k4_xboole_0 X0 X1 \quad (3)$$

Assume the following.

$$\forall X0.k4_xboole_0 X0 k1_xboole_0 = X0 \quad (4)$$

Assume the following.

$$k5_numbers \in k1_ami_2 \quad (5)$$

Assume the following.

$$\neg k5_numbers \in k2_ami_2 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(r1_xboole_0 X0 X1) \Rightarrow (r1_xboole_0 X1 X0) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k7_subset_1 X0 X1 X2 = k4_xboole_0 X1 X2) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (10)$$

Assume the following.

$$k2_ami_2 = k2_scm_inst \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \forall X6.(((m1_subset_1 X2 X1) \wedge (((v1_compos_0 X3) \wedge ((v2_compos_0 X3) \wedge ((v3_compos_0 X3) \wedge (v5_compos_0 X3)))) \wedge (((v1_funct_1 X4) \wedge ((v1_funct_2 X4 X1 X0) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X1 X0)))))) \wedge (((v1_relat_1 X5) \wedge ((v4_relat_1 X5 X0) \wedge ((v1_funct_1 X5) \wedge (v1_partfun1 X5 X0)))) \wedge ((v1_funct_1 X6) \wedge ((v1_funct_2 X6 X3 (k1_funct_2 (k4_card_3 (k3_relat_1 X4 X5)) (k4_card_3 (k3_relat_1 X4 X5)))) \wedge (m1_subset_1 X6 (k1_zfmisc_1 (k2_zfmisc_1 X3 (k1_funct_2 (k4_card_3 (k3_relat_1 X4 X5)) (k4_card_3 (k3_relat_1 X4 X5)))))))))) \Rightarrow \\ & (\forall X7.\forall X8.\forall X9.\forall X10.\forall X11.\forall X12. \\ & \forall X13.(g1_extpro_1 X0 X1 X2 X3 X4 X5 X6 = g1_extpro_1 X7 X8 X9 X10 X11 X12 X13) \Rightarrow ((X0 = X7) \wedge ((X1 = X8) \wedge ((X2 = X9) \wedge ((X3 = X10) \wedge ((X4 = X11) \wedge ((X5 = X12) \wedge (X6 = X13)))))))))) \end{aligned} \quad (12)$$

Assume the following.

$$v5_compos_0 k1_scmpds_i \quad (13)$$

Assume the following.

$$v3_compos_0 k1_scmpds_i \quad (14)$$

Assume the following.

$$v2_compos_0 \ k1_scmpds_i \quad (15)$$

Assume the following.

$$v1_compos_0 \ k1_scmpds_i \quad (16)$$

Assume the following.

$$\forall X0.(l2_struct_0 \ X0) \Rightarrow (l1_struct_0 \ X0) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(l1_memstr_0 \ X1 \ X0) \Rightarrow (l2_struct_0 \ X1) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.(l1_extpro_1 \ X1 \ X0) \Rightarrow ((l1_memstr_0 \ X1 \ X0) \wedge (l1_compos_1 \ X1)) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.m1_subset_1 \ (k6_subset_1 \ X0 \ X1) \ (k1_zfmisc_1 \ X0) \quad (20)$$

Assume the following.

$$\begin{aligned} & (v1_funct_1 \ k6_scmpds_1) \wedge ((v1_funct_2 \ k6_scmpds_1 \ k1_scmpds_i \\ & (k1_funct_2 \ (k4_card_3 \ (k3_relat_1 \ k3_ami_2 \ k4_ami_2)) \ (k4_card_3 \\ & (k3_relat_1 \ k3_ami_2 \ k4_ami_2)))) \wedge (m1_subset_1 \ k6_scmpds_1 \\ & (k1_zfmisc_1 \ (k2_zfmisc_1 \ k1_scmpds_i \ (k1_funct_2 \ (k4_card_3 \\ & (k3_relat_1 \ k3_ami_2 \ k4_ami_2)) \ (k4_card_3 \ (k3_relat_1 \ k3_ami_2 \\ & k4_ami_2)))))) \end{aligned} \quad (21)$$

Assume the following.

$$(v1_relat_1 \ k4_ami_2) \wedge ((v4_relat_1 \ k4_ami_2 \ np_2) \wedge ((v1_funct_1 \ k4_ami_2) \wedge (v1_partfun1 \ k4_ami_2 \ np_2))) \quad (22)$$

Assume the following.

$$\begin{aligned} & (v1_funct_1 \ k3_ami_2) \wedge ((v1_funct_2 \ k3_ami_2 \ k1_ami_2 \ np_2) \wedge \\ & (m1_subset_1 \ k3_ami_2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k1_ami_2 \ np_2)))) \end{aligned} \quad (23)$$

Assume the following.

$$(v1_extpro_1 \ k1_scmpds_2 \ np_2) \wedge (l1_extpro_1 \ k1_scmpds_2 \ np_2) \quad (24)$$

Assume the following.

$$\forall X0.(l2_struct_0 \ X0) \Rightarrow (k4_struct_0 \ X0 = u2_struct_0 \ X0) \quad (25)$$

Assume the following.

$$\forall X0.(l1_struct_0 X0) \Rightarrow (k2_struct_0 X0 = u1_struct_0 X0) \quad (26)$$

Assume the following.

$$k1_scmpds_2 = g1_extpro_1 np_2 k1_ami_2 (k1_funct_7 k5_numbers k1_ami_2) k1_scmpds_i k3_ami_2 k4_ami_2 k6_scmpds_1 \quad (27)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (k1_funct_7 X0 X1 = X0) \quad (28)$$

Assume the following.

$$k1_ami_2 = k2_xboole_0 (k1_tarski k5_numbers) k2_scm_inst \quad (29)$$

Assume the following.

$$\forall X0.(l2_struct_0 X0) \Rightarrow (k8_struct_0 X0 = k7_subset_1 (u1_struct_0 X0) (k2_struct_0 X0) (k1_tarski (k4_struct_0 X0))) \quad (30)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (31)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(l1_extpro_1 X1 X0) \Rightarrow & ((v1_extpro_1 X1 X0) \Rightarrow \\ (X1 = g1_extpro_1 X0 (u1_struct_0 X1) (u2_struct_0 X1) (u1_compos_1 \\ X1) (u1_memstr_0 X0 X1) (u2_memstr_0 X0 X1) (u1_extpro_1 X0 X1))) & \quad (32) \end{aligned}$$

Theorem 1 $k8_struct_0 k1_scmpds_2 = k2_ami_2$.