

l14_scmfsa8a
(TMZLgi5qaq4CaqeYfNHGTA3ZszNqLA7Ey8c)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k11_scmfsa_2 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_compos_1 : \iota \Rightarrow \iota$ be given. Let $k1_scmfsa_2 : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k5_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $k1_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k3_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v4_compos_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $v2_amistd_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_3 : \iota$ be given. Let $v4_amistd_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_compos_0 : \iota \Rightarrow o$ be given. Let $v5_compos_0 : \iota \Rightarrow o$ be given. Let $k6_compos_0 : \iota \Rightarrow \iota$ be given. Let $l1_compos_1 : \iota \Rightarrow o$ be given. Let $v2_compos_0 : \iota \Rightarrow o$ be given. Let $v3_compos_0 : \iota \Rightarrow o$ 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 $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. k1_funct_1 (k16_funcop_1 X0 X1) X0 = X1 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge((v5_ordinal1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finset_1 X1))))\Rightarrow((X1 = k5_afinsq_1 X0)\Leftrightarrow((k1_afinsq_1 X1 = np_1)\wedge(k1_funct_1 X1 k6_numbers = X0))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1)\Rightarrow((v1_xboole_0 X1)\vee(X0 \in X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(k9_xtuple_0 (k2_funcop_1 X0 X1) = X0)\wedge(r1_tarSKI (k10_xtuple_0 (k2_funcop_1 X0 X1)) (k1_tarSKI X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 X2 X0 X1)\Leftrightarrow(m1_subset_1 X2 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k7_funcop_1 X0 X1 = k2_funcop_1 X0 X1 \quad (8)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (9)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0)\Rightarrow(k5_card_1 X0 = k1_card_1 X0) \quad (10)$$

Assume the following.

$$\forall X0.k5_afinsq_1 X0 = k3_afinsq_1 X0 \quad (11)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v5_ordinal1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finset_1 X0))))\Rightarrow(k1_afinsq_1 X0 = k1_card_1 X0) \quad (12)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v5_ordinal1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finset_1 X0))))\Rightarrow(k1_card_1 X0 = k9_xtuple_0 X0) \quad (13)$$

Assume the following.

$$\forall X0.(v5_ordinal1 (k3_afinsq_1 X0))\wedge(v1_finset_1 (k3_afinsq_1 X0)) \quad (14)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (15)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_tarski X0) \quad (16)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow ((\neg v4_compos_0 (k11_scmfsa_2 \\ X0) (u1_compos_1 k1_scmfsa_2)) \wedge ((v2_amistd_1 (k11_scmfsa_2 \\ X0) np_3 k1_scmfsa_2) \wedge (\neg v4_amistd_1 (k11_scmfsa_2 X0) np_3 \\ k1_scmfsa_2))) \end{aligned} \quad (17)$$

Assume the following.

$$\forall X0. ((v1_compos_0 X0) \wedge (v5_compos_0 X0)) \Rightarrow (v4_compos_0 \\ (k6_compos_0 X0) X0) \quad (18)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (19)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1_compos_1 X0) \Rightarrow ((v1_compos_0 (u1_compos_1 X0)) \wedge \\ ((v2_compos_0 (u1_compos_1 X0)) \wedge ((v3_compos_0 (u1_compos_1 \\ X0)) \wedge (v5_compos_0 (u1_compos_1 X0))))) \end{aligned} \quad (20)$$

Assume the following.

$$\forall X0. \forall X1. (l1_extpro_1 X1 X0) \Rightarrow ((l1_memstr_0 X1 X0) \wedge \\ (l1_compos_1 X1)) \quad (21)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (22)$$

Assume the following.

$$\forall X0. (v1_relat_1 (k5_afinsq_1 X0)) \wedge (v1_funct_1 (k5_afinsq_1 \\ X0)) \quad (23)$$

Assume the following.

$$(v1_extpro_1 k1_scmfsa_2 np_3) \wedge (l1_extpro_1 k1_scmfsa_2 np_3) \quad (24)$$

Assume the following.

$$\forall X0. \forall X1. k16_funcop_1 X0 X1 = k7_funcop_1 (k1_tarski \\ X0) X1 \quad (25)$$

Assume the following.

$$\forall X0.\forall X1.k2_funcop_1 X0 X1 = k2_zfmisc_1 X0 (k1_tarSKI X1) \quad (26)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarSKI X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (27)$$

Assume the following.

$$\forall X0.k3_afinsq_1 X0 = k16_funcop_1 k6_numbers X0 \quad (28)$$

Assume the following.

$$\forall X0.(l1_compos_1 X0) \Rightarrow (k2_compos_1 X0 = k6_compos_0 (u1_compos_1 X0)) \quad (29)$$

Theorem 1

$$\begin{aligned} \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow & ((k9_xtuple_0 \\ (k16_funcop_1 k6_numbers (k11_scmfSA_2 X0)) = k1_tarSKI k6_numbers) \wedge & \\ ((k6_numbers \in k9_xtuple_0 (k16_funcop_1 k6_numbers (k11_scmfSA_2 & \\ X0))) \wedge ((k1_funct_1 (k16_funcop_1 k6_numbers (k11_scmfSA_2 X0)) & \\ k6_numbers = k11_scmfSA_2 X0) \wedge ((k5_card_1 (k16_funcop_1 k6_numbers & \\ (k11_scmfSA_2 X0)) = np_1) \wedge (\neg k2_compos_1 k1_scmfSA_2 \in k10_xtuple_0 & \\ (k16_funcop_1 k6_numbers (k11_scmfSA_2 X0)))))) & \end{aligned}$$