

t57_scmfsa8c

(TMK33ZREXWTbJNViV6CrVnsPqF7Je9xLB12)

October 27, 2020

Let $v1_ami_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_scmfsa_2 : \iota$ 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 $r4_scmfsa7b : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_scmfsa8a : \iota \Rightarrow \iota$ be given. Let $r3_scmfsa7b : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k11_scmfsa_2 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ 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 $k1_tarski : \iota \Rightarrow \iota$ 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 $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_afinsq_1 : \iota \Rightarrow o$ be given. Let $v2_compos_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_scmfsa7b : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_ami_2 X0) \wedge (m1_subset_1 X0 (u1_struct_0 k1_scmfsa_2))) \Rightarrow \\ (\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (\neg r3_scmfsa7b \\ (k11_scmfsa_2 X1) X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow & ((k9_xtuple_0 \\ (k16_funcop_1 k6_numbers (k11_scmfsa_2 X0)) = k1_tarski k6_numbers) \wedge & \\ ((k6_numbers \in k9_xtuple_0 (k16_funcop_1 k6_numbers (k11_scmfsa_2 & \\ X0))) \wedge ((k1_funct_1 (k16_funcop_1 k6_numbers (k11_scmfsa_2 X0)) & \\ k6_numbers = k11_scmfsa_2 X0) \wedge ((k5_card_1 (k16_funcop_1 k6_numbers & \\ (k11_scmfsa_2 X0)) = np_1) \wedge (\neg k2_compos_1 k1_scmfsa_2 \in k10_xtuple_0 & \\ (k16_funcop_1 k6_numbers (k11_scmfsa_2 X0)))))) & \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow & ((\neg v1_xboole_0 (k1_scmfsa8a \\ X0)) \wedge ((v1_relat_1 (k1_scmfsa8a X0)) \wedge ((v4_relat_1 (k1_scmfsa8a & \\ X0) k5_numbers) \wedge ((v5_relat_1 (k1_scmfsa8a X0) (u1_compos_1 k1_scmfsa_2)) \wedge & \\ ((v1_funct_1 (k1_scmfsa8a X0)) \wedge ((v1_finset_1 (k1_scmfsa8a X0)) \wedge & \\ ((v1_afinsq_1 (k1_scmfsa8a X0)) \wedge ((v2_compos_1 (k1_scmfsa8a & \\ X0) k1_scmfsa_2) \wedge (v1_scmfsa7b (k1_scmfsa8a X0)))))) & \end{aligned} \quad (6)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (7)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 & \\ X0 (u1_compos_1 k1_scmfsa_2)) \wedge (v1_funct_1 X0))) \Rightarrow & (\forall X1. \\ ((v1_ami_2 X1) \wedge (m1_subset_1 X1 (u1_struct_0 k1_scmfsa_2))) \Rightarrow & \\ ((r4_scmfsa7b X0 X1) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (u1_compos_1 & \\ k1_scmfsa_2)) \wedge ((X2 \in k10_xtuple_0 X0) \wedge (r3_scmfsa7b X2 X1)))) & \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow & (\forall X1.(X1 = \\ k10_xtuple_0 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.(X3 \in k9_xtuple_0 & \\ X0) \wedge (X2 = k1_funct_1 X0 X3)))) & \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (11)$$

Assume the following.

$$\forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (k1_scmfsa8a X0 = k16_funcop_1 k6_numbers (k11_scmfsa_2 X0)) \quad (12)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_ami_2 X0) \wedge (m1_subset_1 X0 (u1_struct_0 k1_scmfsa_2))) \Rightarrow \\ (\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (\neg r4_scmfsa7b \\ (k1_scmfsa8a X1) X0)) \end{aligned}$$