

t8_scmpds_2
(TMcjhmD8KMoR5ernkugDbjxrg1ccvQW2pWb)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_ami_2 : \iota$ be given. Let $k2_ami_2 : \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_scmpds_i : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_scm_inst : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_numbers : \iota$ be given. Let $np_14 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k7_card_1 : \iota \Rightarrow \iota$ be given. Let $np_15 : \iota$ be given. Let $k10_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $k11_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_4 : \iota$ be given. Let $np_5 : \iota$ be given. Let $np_6 : \iota$ be given. Let $np_7 : \iota$ be given. Let $np_8 : \iota$ be given. Let $k7_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_9 : \iota$ be given. Let $np_10 : \iota$ be given. Let $np_11 : \iota$ be given. Let $np_12 : \iota$ be given. Let $np_13 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$k2_ami_2 = k2_scm_inst \quad (2)$$

Assume the following.

$$\neg v1_xboole_0 k2_scm_inst \quad (3)$$

Assume the following.

$$\neg v1_xboole_0 k1_ami_2 \quad (4)$$

Assume the following.

$$m1_subset_1 k2_ami_2 (k1_zfmisc_1 k1_ami_2) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. \\ (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} k1_scmpds_i = k2_xboole_0 (k2_xboole_0 (k2_xboole_0 (k2_xboole_0 \\ (k2_xboole_0 (k1_tarski (k3_xtuple_0 k6_numbers k1_xboole_0 \\ k1_xboole_0)) (ReplSep (toset (\lambda X0 : \iota.m1_subset_1 X0 k4_numbers) \\ (\lambda X0 : \iota.True) (\lambda X0 : \iota.k3_xtuple_0 np_14 k1_xboole_0 \\ (k12_finseq_1 k4_numbers X0)))) (ReplSep (toset (\lambda X0 : \iota. \\ m1_subset_1 X0 k2_scm_inst) (\lambda X0 : \iota.True) (\lambda X0 : \iota. \\ k3_xtuple_0 np_1 k1_xboole_0 (k12_finseq_1 k2_scm_inst X0)))) \\ (ReplSep3 (toset (\lambda X0 : \iota.m2_subset_1 X0 k4_ordinal1 (k7_card_1 \\ np_15))) (\lambda X0 : \iota.toset (\lambda X1 : \iota.m1_subset_1 X1 k2_scm_inst) \\ (\lambda X0 : \iota.\lambda X1 : \iota.toset (\lambda X2 : \iota.m1_subset_1 X2 k4_numbers) \\ (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.X0 \in k2_tarski np_2 np_3) \\ (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.k3_xtuple_0 X0 k1_xboole_0 \\ (k10_finseq_1 X1 X2)))) (ReplSep4 (toset (\lambda X0 : \iota.m2_subset_1 \\ X0 k4_ordinal1 (k7_card_1 np_15))) (\lambda X0 : \iota.toset (\lambda X1 : \\ \iota.m1_subset_1 X1 k2_scm_inst) (\lambda X0 : \iota.\lambda X1 : \iota.toset \\ (\lambda X2 : \iota.m1_subset_1 X2 k4_numbers) (\lambda X0 : \iota.\lambda X1 : \\ \iota.\lambda X2 : \iota.toset (\lambda X3 : \iota.m1_subset_1 X3 k4_numbers) \\ (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.\lambda X3 : \iota.X0 \in k3_enumset1 \\ np_4 np_5 np_6 np_7 np_8) (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \\ \iota.\lambda X3 : \iota.k3_xtuple_0 X0 k1_xboole_0 (k11_finseq_1 X1 X2 \\ X3)))) (ReplSep5 (toset (\lambda X0 : \iota.m2_subset_1 X0 k4_ordinal1 \\ (k7_card_1 np_15))) (\lambda X0 : \iota.toset (\lambda X1 : \iota.m1_subset_1 \\ X1 k2_scm_inst) (\lambda X0 : \iota.\lambda X1 : \iota.toset (\lambda X2 : \iota. \\ m1_subset_1 X2 k2_scm_inst) (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \\ \iota.toset (\lambda X3 : \iota.m1_subset_1 X3 k4_numbers) (\lambda X0 : \iota. \\ \lambda X1 : \iota.\lambda X2 : \iota.\lambda X3 : \iota.toset (\lambda X4 : \iota.m1_subset_1 \\ X4 k4_numbers) (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.\lambda X3 : \\ \iota.\lambda X4 : \iota.X0 \in k3_enumset1 np_9 np_10 np_11 np_12 np_13) \\ (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.\lambda X3 : \iota.\lambda X4 : \iota. \\ k3_xtuple_0 X0 k1_xboole_0 (k7_finseq_4 X1 X2 X3 X4)))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (8)$$

Theorem 1

$$\forall X0.(m2_subset_1 X0 k1_ami_2 k2_ami_2) \Rightarrow (k3_xtuple_0 np_1 \\ k1_xboole_0 (k12_finseq_1 k2_ami_2 X0) \in k1_scmpds_i)$$