

t2_scm_inst
(TMY2mURjasyoAYdrQg6f7fqa8YJszaXN7r3)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_6 : \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_scm_inst : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_9 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k7_card_1 : \iota \Rightarrow \iota$ be given. Let $k6_card_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_scm_inst : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_scm_inst : \iota$ be given. Let $k7_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_7 : \iota$ be given. Let $np_8 : \iota$ be given. Let $k2_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $np_4 : \iota$ be given. Let $np_5 : \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1_xxreal_0 X1 X0))) \quad (1)$$

Assume the following.

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

Assume the following.

$$((v2_xxreal_0 np_9) \wedge (m2_subset_1 np_9 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_9 k5_numbers) \wedge (m1_subset_1 np_9 k1_numbers)) \quad (3)$$

Assume the following.

$$((v2_xxreal_0 np_6) \wedge (m2_subset_1 np_6 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_6 k5_numbers) \wedge (m1_subset_1 np_6 k1_numbers)) \quad (4)$$

Assume the following.

$$\neg r1_xxreal_0 np_9 np_6 \quad (5)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k7_card_1 X0 = k6_card_1 X0) \quad (6)$$

Assume the following.

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

Assume the following.

$$k1_scm_inst = k1_xboole_0 \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k6_card_1 X0 = X0) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. \\ (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} k3_scm_inst = k2_xboole_0 (k2_xboole_0 (k2_xboole_0 (k1_tarski \\ (k3_xtuple_0 k1_scm_inst k1_xboole_0 k1_xboole_0)) (ReplSep2 \\ (toset (\lambda X0 : \iota.m1_subset_1 X0 (k7_card_1 np_9))) (\lambda X0 : \iota. \\ \iota.toset (\lambda X1 : \iota.m1_subset_1 X1 k5_numbers)) (\lambda X0 : \iota. \\ \lambda X1 : \iota.X0 = np_6) (\lambda X0 : \iota.\lambda X1 : \iota.k3_xtuple_0 X0 \\ (k12_finseq_1 k5_numbers X1) k1_xboole_0))) (ReplSep3 (toset \\ (\lambda X0 : \iota.m1_subset_1 X0 (k7_card_1 np_9))) (\lambda X0 : \iota. \\ toset (\lambda X1 : \iota.m1_subset_1 X1 k5_numbers)) (\lambda X0 : \iota.\lambda X1 : \\ \iota.toset (\lambda X2 : \iota.m1_subset_1 X2 k2_scm_inst)) (\lambda X0 : \\ \iota.\lambda X1 : \iota.\lambda X2 : \iota.X0 \in k7_domain_1 k5_numbers np_7 \\ np_8) (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.k3_xtuple_0 X0 (k12_finseq_1 \\ k5_numbers X1) (k12_finseq_1 k2_scm_inst X2)))) (ReplSep3 (toset \\ (\lambda X0 : \iota.m1_subset_1 X0 (k7_card_1 np_9))) (\lambda X0 : \iota. \\ toset (\lambda X1 : \iota.m1_subset_1 X1 k2_scm_inst)) (\lambda X0 : \iota. \\ \lambda X1 : \iota.toset (\lambda X2 : \iota.m1_subset_1 X2 k2_scm_inst)) (\\ \lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.X0 \in k10_domain_1 k5_numbers \\ np_1 np_2 np_3 np_4 np_5) (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \\ \iota.k3_xtuple_0 X0 k1_xboole_0 (k2_finseq_4 k2_scm_inst X1 X2))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (12)$$

Theorem 1

$$\forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (k3_xtuple_0 np_6 (k12_finseq_1 \\ k5_numbers X0) k1_xboole_0 \in k3_scm_inst)$$