

t4_scmpds_i (TM-
NqM67DWp1EA9bziBUqD8xh5vjyZRq4Pv2)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k7_card_1 : \iota \Rightarrow \iota$ be given. Let $np_15 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_scmpds_i : \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k4_scmpds_i : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_numbers : \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow (k7_partfun1 X0 (k12_finseq_1 X0 X1) np_1 = X1)) \quad (2)$$

Assume the following.

$$\forall X0. k9_finseq_1 X0 = k5_finseq_1 X0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k12_finseq_1 X0 X1 = k5_finseq_1 X1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k2_xtuple_0 (k3_xtuple_0 X0 X1 X2) = X2 \quad (5)$$

Assume the following.

$$\neg v1_xboole_0 k4_numbers \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (m2_finseq_1 (k12_finseq_1 X0 X1) X0) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k1_scmpds_i) \Rightarrow & ((\exists X1.(v1_int_1 \\ X1) \wedge (\exists X2.(m2_subset_1 X2 k4_ordinal1 (k7_card_1 np_15)) \wedge \\ (X0 = k3_xtuple_0 X2 k1_xboole_0 (k9_finseq_1 X1)))) \Rightarrow & (\forall X1. \\ (v1_int_1 X1) \Rightarrow ((X1 = k4_scmpds_i X0) \Leftrightarrow & (\exists X2.(m2_finseq_1 \\ X2 k4_numbers) \wedge ((X2 = k2_xtuple_0 X0) \wedge (X1 = k7_partfun1 k4_numbers \\ X2 np_1)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Leftrightarrow (X0 \in k4_numbers) \quad (9)$$

Theorem 1

$$\begin{aligned} \forall X0.(m2_subset_1 X0 k4_ordinal1 (k7_card_1 np_15)) \Rightarrow & (\\ \forall X1.(m1_subset_1 X1 k1_scmpds_i) \Rightarrow (\forall X2.(v1_int_1 \\ X2) \Rightarrow ((X1 = k3_xtuple_0 X0 k1_xboole_0 (k9_finseq_1 X2) \Rightarrow & (k4_scmpds_i \\ X1 = X2)))) \end{aligned}$$