

t48_finseq_3 (TMFn-
sXvT4JywGYKYhjP5YBEUJxL5VQHbbPB)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k14_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_finseq_2 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$k14_finseq_1 k1_xboole_0 = k1_xboole_0 \quad (2)$$

Assume the following.

$$\forall X0 : \iota \Rightarrow o. ((X0 k6_numbers) \wedge (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X0 X1) \Rightarrow (X0 (k1_nat_1 X1 np_1)))))) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (X0 X1)) \quad (3)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k2_finseq_1 X0 = k1_finseq_1 X0) \quad (5)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((k14_finseq_1 (k2_finseq_1 X0) = k1_finseq_2 X0) \Rightarrow (k14_finseq_1 (k2_finseq_1 (k1_nat_1 X0 np_1)) = k1_finseq_2 (k1_nat_1 X0 np_1))) \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v3_card_1 (k1_finseq_1 X0) X0) \quad (7)$$

Assume the following.

$$(v1_relat_1 (k1_finseq_2 k6_numbers)) \wedge ((v1_funct_1 (k1_finseq_2 k6_numbers)) \wedge ((v1_xboole_0 (k1_finseq_2 k6_numbers)) \wedge (v1_finseq_1 (k1_finseq_2 k6_numbers)))))) \quad (8)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (9)$$

Assume the following.

$$\forall X0. (v1_xboole_0 \ X0) \Rightarrow (v7_ordinal1 \ X0) \quad (10)$$

Assume the following.

$$\forall X0. (v3_card_1 \ X0 \ k1_xboole_0) \Rightarrow (v1_xboole_0 \ X0) \quad (11)$$

Theorem 1

$$\forall X0. (v7_ordinal1 \ X0) \Rightarrow (k14_finseq_1 (k2_finseq_1 \ X0) = k1_finseq_2 \ X0)$$