

t109_finseq_3

(TMJE2YuZ9p6yM9wdPEWv89Kd4PgVB4n25tc)

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Let $v7_ordinal1 : \iota \Rightarrow o$ 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. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k2_finseq_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k5_card_1 (k2_finseq_1 X0) = X0) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k2_finseq_1 X0 = k7_subset_1 k5_numbers (k2_finseq_1 (k1_nat_1 X0 np_1)) (k1_tarski (k1_nat_1 X0 np_1))) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \Rightarrow ((\neg(X0 \in k1_relset_1 k5_numbers X1) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (\neg(k3_finseq_1 X1 = k1_nat_1 X2 np_1) \wedge (k3_finseq_1 (k2_finseq_3 X0 X1) = X2)))) \wedge ((\neg X0 \in k1_relset_1 k5_numbers X1) \Rightarrow (k2_finseq_3 X0 X1 = X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finseq_1 X2))) \Rightarrow (((k3_finseq_1 X2 = k1_nat_1 X0 np_1) \wedge (X1 \in k1_relset_1 k5_numbers X2)) \Rightarrow (k3_finseq_1 (k2_finseq_3 X1 X2) = X0)))) \end{aligned}$$