

t13_rfinseq (TMVRhtRm- cmTwyEMHUEEENKkpHuuN7MAx9xW)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k3_rfinseq : \iota \Rightarrow \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \Rightarrow ((X1 = k9_finseq_1 X0) \Leftrightarrow ((k3_finseq_1 X1 = np_1) \wedge (k1_funct_1 X1 np_1 = X0))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_valued_0 X0))) \Rightarrow (k1_seq_1 X0 X1 = k1_funct_1 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k12_finseq_1 X0 X1 = k5_finseq_1 X1) \quad (5)$$

Assume the following.

$$\forall X0. v1_finseq_1 (k5_finseq_1 X0) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 \ X1 \ X0) \Rightarrow ((v1_funct_1 \ X1) \wedge (v1_finseq_1 \ X1) \wedge (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ X0)))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 \ X1 \ X0) \Rightarrow ((v1_relat_1 \ X1) \wedge (v1_funct_1 \ X1) \wedge (v1_finseq_1 \ X1)) \quad (9)$$

Assume the following.

$$\forall X0.(v1_relat_1 \ (k9_finseq_1 \ X0)) \wedge (v1_funct_1 \ (k9_finseq_1 \ X0)) \quad (10)$$

Assume the following.

$$\forall X0.(m1_finseq_1 \ X0 \ k1_numbers) \Rightarrow (m2_finseq_1 \ (k3_rfinseq \ X0) \ k1_numbers) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 \ X0) \wedge (m1_subset_1 \ X1 \ X0)) \Rightarrow (m2_finseq_1 \ (k12_finseq_1 \ X0 \ X1) \ X0) \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 \ X0 \ k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ & X1 \ k1_numbers) \Rightarrow ((X1 = k3_rfinseq \ X0) \Leftrightarrow ((k3_finseq_1 \ X1 = k3_finseq_1 \\ & X0) \wedge ((k1_seq_1 \ X1 \ (k3_finseq_1 \ X1) = k1_seq_1 \ X0 \ (k3_finseq_1 \ X0)) \wedge \\ & (\forall X2.(v7_ordinal1 \ X2) \Rightarrow (((r1_xxreal_0 \ np_1 \ X2) \wedge (r1_xxreal_0 \\ & X2 \ (k9_real_1 \ (k3_finseq_1 \ X1) \ np_1))) \Rightarrow (k1_seq_1 \ X1 \ X2 = k9_real_1 \\ & (k1_seq_1 \ X0 \ X2) \ (k1_seq_1 \ X0 \ (k3_real_1 \ X2 \ np_1)))))))))) \quad (13) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 \ X1 \ X0) \Rightarrow (v5_relat_1 \ X1 \ X0) \quad (14)$$

Assume the following.

$$\forall X0.((v1_relat_1 \ X0) \wedge (v5_relat_1 \ X0 \ k1_numbers)) \Rightarrow ((v1_relat_1 \ X0) \wedge (v3_valued_0 \ X0)) \quad (15)$$

Theorem 1

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (k3_rfinseq \ (k12_finseq_1 \ k1_numbers \ X0) = k12_finseq_1 \ k1_numbers \ X0)$$