

t53_matrprob (TMK- WVPK79TVCe5byFko9RWxr8KzHKtgXLhq)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_matrprob : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k18_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ 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. Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow ((\forall X1.(v7_ordinal1 \\ & X1) \Rightarrow ((X1 \in k4_finseq_1 X0) \Rightarrow (r1_xxreal_0 k6_numbers (k1_seq_1 \\ & X0 X1)))) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X1 \in k4_finseq_1 X0) \Rightarrow \\ & (r1_xxreal_0 (k1_seq_1 X0 X1) (k18_rvsum_1 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (6)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_1 \ X1 \ X0) \Rightarrow ((v1_relat_1 \ X1) \wedge (v1_funct_1 \ X1) \wedge (v1_finseq_1 \ X1)) \quad (8)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (9)$$

Assume the following.

$$\forall X0. ((v1_relat_1 \ X0) \wedge (v1_funct_1 \ X0) \wedge (v1_finseq_1 \ X0)) \Rightarrow (m1_subset_1 \ (k4_finseq_1 \ X0) \ (k1_zfmisc_1 \ k5_numbers)) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0. (m2_finseq_1 \ X0 \ k1_numbers) \Rightarrow ((v1_matrprob \ X0) \Leftrightarrow ((\\ \forall X1. (m2_subset_1 \ X1 \ k1_numbers \ k5_numbers) \Rightarrow ((X1 \in k4_finseq_1 \\ X0) \Rightarrow (r1_xxreal_0 \ k6_numbers \ (k1_seq_1 \ X0 \ X1)))) \wedge (k18_rvsum_1 \\ X0 = np_1))) \end{aligned} \quad (11)$$

Assume the following.

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

Theorem 1

$$\begin{aligned} \forall X0. ((\neg v1_xboole_0 \ X0) \wedge ((v1_matrprob \ X0) \wedge (m2_finseq_1 \\ X0 \ k1_numbers))) \Rightarrow (\forall X1. (m2_subset_1 \ X1 \ k1_numbers \ k5_numbers) \Rightarrow \\ ((X1 \in k4_finseq_1 \ X0) \Rightarrow (r1_xxreal_0 \ (k1_seq_1 \ X0 \ X1) \ np_1))) \end{aligned}$$