

t46_entropy1

(TMSbhQ1x8SkrxKKfpBGzgJJ3fWLF LujtW32)

October 27, 2020

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 $v3_relat_1 : \iota \Rightarrow o$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $v6_matrprob : \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k2_entropy1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_entropy1 : \iota \Rightarrow \iota$ be given. Let $v4_matrprob : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m1_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_entropy1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_matrix_1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 k1_numbers))) \Rightarrow \\ ((v4_matrprob X0) \Leftrightarrow (v1_matrprob (k2_entropy1 k1_numbers X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_matrprob X0) \wedge (m2_finseq_1 X0 k1_numbers)) \Rightarrow (\\ \forall X1.((\neg v3_relat_1 X1) \wedge ((v1_matrix_1 X1) \wedge ((v6_matrprob \\ X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 k1_numbers))))) \Rightarrow ((k3_finseq_1 \\ X0 = k3_finseq_1 X1) \Rightarrow (v4_matrprob (k6_matrixr1 (k1_entropy1 X0) \\ X1)))) \end{aligned} \quad (2)$$

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.

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

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge (v7_ordinal1 X1) \wedge (v7_ordinal1 X2)) \Rightarrow (\forall X3. (m1_matrix_1 X3 X0 X1 X2) \Rightarrow ((v1_matrix_1 X3) \wedge (m2_finseq_1 X3 (k3_finseq_2 X0)))) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. (((v1_matrix_1 X0) \wedge (m1_finseq_1 X0 (k3_finseq_2 k1_numbers))) \wedge ((v1_matrix_1 X1) \wedge (m1_finseq_1 X1 (k3_finseq_2 k1_numbers)))) \Rightarrow ((v1_matrix_1 (k6_matrixr1 X0 X1)) \wedge (m2_finseq_1 (k6_matrixr1 X0 X1) (k3_finseq_2 k1_numbers))) \quad (10)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (11)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (m2_subset_1 (k3_finseq_1 X0) k1_numbers k5_numbers) \quad (12)$$

Assume the following.

$$\forall X0. (m1_finseq_1 X0 k1_numbers) \Rightarrow ((v1_entropy1 (k1_entropy1 X0) (k3_finseq_1 X0)) \wedge (m1_matrix_1 (k1_entropy1 X0) k1_numbers (k3_finseq_1 X0) (k3_finseq_1 X0))) \quad (13)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (14)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (15)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_matrprob\ X0)\wedge(m2_finseq_1\ X0\ k1_numbers))\Rightarrow(\\ & \quad \forall X1.((\neg v3_relat_1\ X1)\wedge((v1_matrix_1\ X1)\wedge((v6_matrprob \\ & \quad X1)\wedge(m2_finseq_1\ X1\ (k3_finseq_2\ k1_numbers))))))\Rightarrow((k3_finseq_1 \\ X0 = k3_finseq_1\ X1)\Rightarrow(v1_matrprob\ (k2_entropy1\ k1_numbers\ (k6_matrixr1 \\ (k1_entropy1\ X0)\ X1)))) \end{aligned}$$