

t45_entropy1 (TM-
JAuMfPc2gLwaM3wHhMp5i6aD3oqZznrMR)

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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 $k2_entropy1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_matrixr1 : \iota \Rightarrow \iota$ be given. Let $k10_matrixr1 : \iota \Rightarrow \iota$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $v4_matrprob : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ 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.

$$\begin{aligned} \forall X0.((v1_matrprob X0) \wedge (m2_finseq_1 X0 k1_numbers)) \Rightarrow (\\ \forall X1.((v1_matrprob X1) \wedge (m2_finseq_1 X1 k1_numbers)) \Rightarrow (\\ v4_matrprob (k6_matrixr1 (k9_matrixr1 X0) (k10_matrixr1 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (3)$$

Assume the following.

$$\forall X0. (m1_finseq_1 X0 k1_numbers) \Rightarrow ((v1_matrix_1 (k9_matrixr1 X0)) \wedge (m2_finseq_1 (k9_matrixr1 X0) (k3_finseq_2 k1_numbers))) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (((v1_matrix_1 X0) \wedge (m1_finseq_1 X0 (k3_finseq_2 \\ k1_numbers))) \wedge ((v1_matrix_1 X1) \wedge (m1_finseq_1 X1 (k3_finseq_2 \\ k1_numbers)))) \Rightarrow ((v1_matrix_1 (k6_matrixr1 X0 X1)) \wedge (m2_finseq_1 \\ (k6_matrixr1 X0 X1) (k3_finseq_2 k1_numbers))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. (m1_finseq_1 X0 k1_numbers) \Rightarrow ((v1_matrix_1 (k10_matrixr1 X0)) \wedge (m2_finseq_1 (k10_matrixr1 X0) (k3_finseq_2 k1_numbers))) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_matrprob\ X0)\wedge(m2_finseq-1\ X0\ k1_numbers))\Rightarrow(\\ & \forall X1.((v1_matrprob\ X1)\wedge(m2_finseq-1\ X1\ k1_numbers))\Rightarrow(\\ & v1_matrprob\ (k2_entropy1\ k1_numbers\ (k6_matrixr1\ (k9_matrixr1 \\ & \quad X0)\ (k10_matrixr1\ X1)))) \end{aligned}$$