

t8_matrprob
(TMZo3SXyNYTmvB1nHGUY3SmxNfurJhcGW2N)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13_finseq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.(m1_subset_1 X2 X1) \Rightarrow (m2_finseq_1 (k2_finseq_2 X0 X2) X1))) \quad (1)$$

Assume the following.

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

Assume the following.

$$\forall X0.k3_finseq_2 X0 = k13_finseq_1 X0 \quad (3)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Leftrightarrow (\forall X1.\neg X1 \in X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k13_finseq_1 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (m2_finseq_1 X2 X0)) \quad (5)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.\forall X2.(m2_finseq_1 X2 X1) \Rightarrow (m2_finseq_1 (k2_finseq_2 X0 X2) (k3_finseq_2 X1)))$$