

t19_matrix_1
(TMG7HsjUyDkk9RfRRJcXx28GkRniJDzNtE2)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\ (\forall X2. (m1_subset_1 X2 X0) \Rightarrow (m2_finseq_1 (k10_finseq_1 X1 \\ X2) X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (\neg v1_xboole_0 X1) \Rightarrow (\\ \forall X2. (m2_finseq_1 X2 X1) \Rightarrow (\forall X3. (m2_finseq_1 X3 X1) \Rightarrow \\ (((k3_finseq_1 X2 = X0) \wedge (k3_finseq_1 X3 = X0)) \Rightarrow (m1_matrix_1 (k10_finseq_1 \\ X2 X3) X1 np_2 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\ (\forall X2. (m1_subset_1 X2 X0) \Rightarrow (k10_finseq_1 X1 X2 \in k4_finseq_2 \\ np_2 X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.k4_finseq_2\ X0\ X1 = ReplSep \\ (toset\ (\lambda X2 : \iota.m2_finseq_2\ X2\ X1\ (k3_finseq_2\ X1)))) (\lambda X2 : \\ \iota.k3_finseq_1\ X2 = X0)\ (\lambda X2 : \iota.X2)) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1) \Rightarrow (v7_ordinal1\ X0) \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.(\neg v1_xboole_0\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow \\ (\forall X2.(m1_subset_1\ X2\ X0) \Rightarrow (\forall X3.(m1_subset_1\ X3\ X0) \Rightarrow \\ (\forall X4.(m1_subset_1\ X4\ X0) \Rightarrow (m1_matrix_1\ (k10_finseq_1\ (\\ k10_finseq_1\ X1\ X2)\ (k10_finseq_1\ X3\ X4))\ X0\ np_2\ np_2)))))) \end{aligned}$$