

t15_matrix_9

(TMSeyLvX6iSKKLNkjoJWJdJxQBHfWrfF2bP)

October 27, 2020

Let $k3_finseq_5 : \iota \Rightarrow \iota$ be given. Let $k1_finseq_2 : \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k3_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $np_2 : \iota$ be given. Let $np_1 : \iota$ be given. Let $k10_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_finseq_1 : \iota \Rightarrow \iota$ 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. 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. k3_finseq_5 (k10_finseq_1 X0 X1) = k10_finseq_1 X1 X0 \quad (1)$$

Assume the following.

$$k1_finseq_2 np_3 = k11_finseq_1 np_1 np_2 np_3 \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (k11_finseq_1 X0 X1 X2 = k7_finseq_1 \\ (k9_finseq_1 X0) (k10_finseq_1 X1 X2)) \wedge (k11_finseq_1 X0 X1 X2 = \\ k7_finseq_1 (k10_finseq_1 X0 X1) (k9_finseq_1 X2)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ X1))) \Rightarrow (k3_finseq_5 (k7_finseq_1 (k9_finseq_1 X0) X1) = k7_finseq_1 \\ (k3_finseq_5 X1) (k9_finseq_1 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0 np_3) \wedge (m2_subset_1 np_3 k1_numbers k5_numbers)) \wedge \\ ((m1_subset_1 np_3 k5_numbers) \wedge (m1_subset_1 np_3 k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_2) \wedge (m2_subset_1 \ np_2 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_2 \ k5_numbers) \wedge (m1_subset_1 \ np_2 \ k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 \ X0) \wedge \\ & ((m1_subset_1 \ X1 \ X0) \wedge ((m1_subset_1 \ X2 \ X0) \wedge (m1_subset_1 \ X3 \ X0)))) \Rightarrow \\ & (k3_finseq_4 \ X0 \ X1 \ X2 \ X3 = k11_finseq_1 \ X1 \ X2 \ X3) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (v1_relat_1 \ (k10_finseq_1 \ X0 \ X1)) \wedge (v1_funct_1 \\ & (k10_finseq_1 \ X0 \ X1)) \end{aligned} \quad (10)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. v1_finseq_1 \ (k10_finseq_1 \ X0 \ X1) \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. k10_finseq_1 \ X0 \ X1 = k7_finseq_1 \ (k9_finseq_1 \\ & X0) \ (k9_finseq_1 \ X1) \end{aligned} \quad (13)$$

Theorem 1

$$k3_finseq_5 \ (k1_finseq_2 \ np_3) = k3_finseq_4 \ k5_numbers \ np_3 \ np_2 \ np_1$$