

t44_matrix10
(TMSbbi1SSAhtVy2ggDz1MEphdk7pwc9uHs)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m1_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $r1_matrix10 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_matrix10 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_matrix_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (1)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge (v7_ordinal1 X1) \wedge (v7_ordinal1 X2)) \Rightarrow (\forall X3. (m1_matrix_1 X3 X0 X1 X2) \Rightarrow ((v1_matrix_1 X3) \wedge (m2_finseq_1 X3 (k3_finseq_2 X0)))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (((v1_matrix_1 X1) \wedge (m1_finseq_1 X1 (k3_finseq_2 X0))) \wedge ((v7_ordinal1 X2) \wedge (v7_ordinal1 X3))) \Rightarrow (m1_subset_1 (k3_matrix_1 X0 X1 X2 X3) X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_matrix_1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 k1_numbers))) \Rightarrow \\ & (\forall X1. ((v1_matrix_1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 k1_numbers))) \Rightarrow \\ & ((r2_matrix10 X0 X1) \Leftrightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow (\forall X3. \\ & (v7_ordinal1 X3) \Rightarrow ((k4_tarski X2 X3 \in k2_matrix_1 X0) \Rightarrow (r1_xxreal_0 \\ & (k3_matrix_1 k1_numbers X0 X2 X3) (k3_matrix_1 k1_numbers X1 X2 \\ & X3)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_matrix_1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 k1_numbers))) \Rightarrow \\
& (\forall X1.((v1_matrix_1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 k1_numbers))) \Rightarrow \\
& ((r1_matrix10 X0 X1) \Leftrightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3. \\
& (v7_ordinal1 X3) \Rightarrow (\neg(k4_tarski X2 X3 \in k2_matrix_1 X0) \wedge (r1_xxreal_0 \\
& (k3_matrix_1 k1_numbers X1 X2 X3) (k3_matrix_1 k1_numbers X0 X2 \\
& X3)))))))
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (\\
& (r1_xxreal_0 X0 X1) \vee (r1_xxreal_0 X1 X0))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xxreal_0 X0) \tag{8}$$

Theorem 1

$$\begin{aligned}
& \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (m1_matrix_1 X1 k1_numbers \\
& X0 X0) \Rightarrow (\forall X2. (m1_matrix_1 X2 k1_numbers X0 X0) \Rightarrow ((r1_matrix10 \\
& X1 X2) \Rightarrow (r2_matrix10 X1 X2))))
\end{aligned}$$