

t5_matrix10

(TMWgH7UV1e41nyKpGhgVi5RwSbJRJwAVKde)

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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 $k2_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k1_matrix10 : \iota \Rightarrow \iota$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_complex1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1_matrix_1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 \\ X0))) \Rightarrow (\forall X2. ((v1_matrix_1 X2) \wedge (m2_finseq_1 X2 (k3_finseq_2 \\ X0))) \Rightarrow (((k3_finseq_1 X1 = k3_finseq_1 X2) \wedge (k1_matrix_1 X1 = k1_matrix_1 \\ X2)) \Rightarrow (k2_matrix_1 X1 = k2_matrix_1 X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((v7_ordinal1 \\ X1) \wedge (v7_ordinal1 X2))) \Rightarrow (\forall X3. (m1_matrix_1 X3 X0 X1 X2) \Rightarrow \\ ((v1_matrix_1 X3) \wedge (m2_finseq_1 X3 (k3_finseq_2 X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_matrix_1 X0) \wedge (m1_finseq_1 X0 (k3_finseq_2 k1_numbers))) \Rightarrow \\ ((v1_matrix_1 (k1_matrix10 X0)) \wedge (m2_finseq_1 (k1_matrix10 X0) \\ (k3_finseq_2 k1_numbers))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_matrix_1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 k1_numbers))) \Rightarrow \\
& (\forall X1.((v1_matrix_1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 k1_numbers))) \Rightarrow \\
& ((X1 = k1_matrix10 X0) \Leftrightarrow ((k3_finseq_1 X1 = k3_finseq_1 X0) \wedge ((k1_matrix_1 \\
& \quad X1 = k1_matrix_1 X0) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3. \\
& \quad (v7_ordinal1 X3) \Rightarrow ((k4_tarski X2 X3 \in k2_matrix_1 X0) \Rightarrow (k3_matrix_1 \\
& \quad k1_numbers X1 X2 X3 = k18_complex1 (k3_matrix_1 k1_numbers X0 X2 \\
& \quad X3))))))))))
\end{aligned} \tag{6}$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_matrix_1 X1 k1_numbers \\
X0 X0) \Rightarrow (k2_matrix_1 X1 = k2_matrix_1 (k1_matrix10 X1)))$$