

t50_matrixc1 (TMd-
mxNt9RKpA9ytLUXFpuYsfiKbXz2JR3Bb)

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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 $k2_numbers : \iota$ be given. Let $k11_matrixc1 : \iota \Rightarrow \iota$ be given. Let $k10_matrixc1 : \iota \Rightarrow \iota$ be given. Let $k4_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k8_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k9_matrix_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_rsum_1 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k3_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_matrix_1 X1) \wedge \\ (m2_finseq_1 X1 (k3_finseq_2 X0))) \Rightarrow (\forall X2. (v7_ordinal1 \\ X2) \Rightarrow ((X2 \in k2_finseq_1 (k1_matrix_1 X1)) \Rightarrow (k8_matrix_1 X0 (k4_matrix_1 \\ X0 X1) X2 = k9_matrix_1 X0 X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\neg v1_xboole_0 \ k2_numbers \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((v1_matrix_1 X1) \wedge \\ (m1_finseq_1 X1 (k3_finseq_2 X0)))) \Rightarrow ((v1_matrix_1 (k4_matrix_1 \\ X0 X1)) \wedge (m2_finseq_1 (k4_matrix_1 X0 X1) (k3_finseq_2 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_matrix_1 X0) \wedge (m1_finseq_1 X0 (k3_finseq_2 k2_numbers))) \Rightarrow \\ (m2_finseq_1 (k11_matrixc1 X0) k2_numbers) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_matrix_1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 k2_numbers))) \Rightarrow \\
& (\forall X1.(m2_finseq_1 X1 k2_numbers) \Rightarrow ((X1 = k10_matrixc1 X0) \Leftrightarrow \\
& ((k3_finseq_1 X1 = k3_finseq_1 X0) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow \\
& ((X2 \in k2_finseq_1 (k3_finseq_1 X0)) \Rightarrow (k9_matrix_5 X1 X2 = k17_rvsum_1 \\
& (k8_matrix_1 k2_numbers X0 X2))))))
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_matrix_1 X1) \wedge \\
& (m2_finseq_1 X1 (k3_finseq_2 X0))) \Rightarrow (\forall X2.((v1_matrix_1 \\
& X2) \wedge (m2_finseq_1 X2 (k3_finseq_2 X0))) \Rightarrow ((X2 = k4_matrix_1 X0 X1) \Leftrightarrow \\
& ((k3_finseq_1 X2 = k1_matrix_1 X1) \wedge (\forall X3.(v7_ordinal1 \\
& X3) \Rightarrow (\forall X4.(v7_ordinal1 X4) \Rightarrow ((k4_tarski X3 X4 \in k2_matrix_1 \\
& X2) \Leftrightarrow (k4_tarski X4 X3 \in k2_matrix_1 X1)))))) \wedge (\forall X3.(v7_ordinal1 \\
& X3) \Rightarrow (\forall X4.(v7_ordinal1 X4) \Rightarrow ((k4_tarski X4 X3 \in k2_matrix_1 \\
& X1) \Rightarrow (k3_matrix_1 X0 X2 X3 X4 = k3_matrix_1 X0 X1 X4 X3))))))
\end{aligned} \tag{7}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_matrix_1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 k2_numbers))) \Rightarrow \\
& (\forall X1.(m2_finseq_1 X1 k2_numbers) \Rightarrow ((X1 = k11_matrixc1 X0) \Leftrightarrow \\
& ((k3_finseq_1 X1 = k1_matrix_1 X0) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow \\
& ((X2 \in k2_finseq_1 (k1_matrix_1 X0)) \Rightarrow (k9_matrix_5 X1 X2 = k17_rvsum_1 \\
& (k9_matrix_1 k2_numbers X0 X2))))))
\end{aligned} \tag{8}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_matrix_1 X0) \wedge (m2_finseq_1 X0 (k3_finseq_2 k2_numbers))) \Rightarrow \\
& (k11_matrixc1 X0 = k10_matrixc1 (k4_matrix_1 k2_numbers X0))
\end{aligned}$$