

t1_matrix13
(TMTkgqdRYNudfP2i9mbntxP4w93zFe9dPBj)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m1_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (\neg(k6_numbers \neq X0) \wedge (r1_xxreal_0\ X0\ k6_numbers)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & (\neg v1_xboole_0\ X2) \Rightarrow (\forall X3.(m1_matrix_1\ X3\ X2\ X0\ X1) \Rightarrow ((k3_finseq_1 \\ & X3 = X0) \wedge (k2_matrix_1\ X3 = k2_zfmisc_1\ (k2_finseq_1\ X0)\ (k2_finseq_1 \\ & (k1_matrix_1\ X3))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & (\neg v1_xboole_0\ X2) \Rightarrow ((\neg r1_xxreal_0\ X0\ k1_xboole_0) \Rightarrow (\forall X3. \\ & (m1_matrix_1\ X3\ X2\ X0\ X1) \Rightarrow ((k3_finseq_1\ X3 = X0) \wedge ((k1_matrix_1 \\ & X3 = X1) \wedge (k2_matrix_1\ X3 = k2_zfmisc_1\ (k2_finseq_1\ X0)\ (k2_finseq_1 \\ & X1)))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(\neg v1_xboole_0\ X1) \Rightarrow (\\ & \forall X2.(m1_matrix_1\ X2\ X1\ k1_xboole_0\ X0) \Rightarrow ((k3_finseq_1\ X2 = \\ & k1_xboole_0) \wedge ((k1_matrix_1\ X2 = k1_xboole_0) \wedge (k2_matrix_1\ X2 = \\ & k1_xboole_0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\\ & \forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3.(m1_matrix_1 X3 X0 X1 \\ X2) \Rightarrow (((X1 = k6_numbers) \Rightarrow (X2 = k6_numbers)) \Leftrightarrow ((k3_finseq_1 X3 = \\ & X1) \wedge (k1_matrix_1 X3 = X2)))))) \end{aligned}$$