t58_matrix_4 (TMVmPc3NL8CfqVM479eyweiVZP8gnMs6vfs)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ 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 $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_matrix\_1 : \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $k13\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0\ X1) \Rightarrow (\forall X2.((v1\_matrix\_1\ X2) \wedge (m2\_finseq\_1\ X2\ (k3\_finseq\_2\ X1))) \Rightarrow ((k3\_finseq\_1\ X2 = X0) \Rightarrow (m1\_matrix\_1\ X2\ X1\ X0\ (k1\_matrix\_1\ X2))))) \tag{1}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{2}$$

Assume the following.

$$\forall X0.k3\_finseq\_2\ X0 = k13\_finseq\_1\ X0 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Rightarrow ((v1\_funct\_1\ X1) \wedge ((v1\_finseq\_1\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ X0))))) \tag{4}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finseq\_1\ X0) \wedge (v1\_matrix\_1\ X0)))) \Rightarrow (m1\_subset\_1\ (k1\_matrix\_1\ X0)\ k5\_numbers) \tag{5}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow(\forall X2.(v7\_ordinal1\ X2)\Rightarrow(\forall X3.((v1\_matrix\_1\ X3)\wedge(m2\_finseq\_1\ X3\ (k3\_finseq\_2\ X0)))\Rightarrow((m1\_matrix\_1\ X3\ X0\ X1\ X2)\Leftrightarrow((k3\_finseq\_1\ X3 = X1)\wedge(\forall X4.(m2\_finseq\_1\ X4\ X0)\Rightarrow((X4 \in k10\_xtuple\_0\ X3)\Rightarrow(k3\_finseq\_1\ X4 = X2)))))))) \tag{6}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{8}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_matrix\_1\ X1)\wedge(m2\_finseq\_1\ X1\ (k3\_finseq\_2\ X0)))\Rightarrow((\neg r1\_xxreal\_0\ (k3\_finseq\_1\ X1)\ k6\_numbers)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ k5\_numbers)\Rightarrow((m1\_matrix\_1\ X1\ X0\ X2\ (k1\_matrix\_1\ X1))\Leftrightarrow(X2 = k3\_finseq\_1\ X1)))))$$