# t33_matrixr2 (TMR15AdG5nARbX6MRA62hN2B6nvtyX3w8EY)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_matrix\_1 : \iota \Rightarrow o$ be given. Let $k11\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.k10\_xtuple\_0\ (k11\_finseq\_1\ X0\ X1\ X2) = k1\_enumset1\ X0\ X1\ X2 \tag{1}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.\forall X2.(v1\_relat\_1\ (k11\_finseq\_1\ X0\ X1\ X2)) \wedge (v1\_funct\_1\ (k11\_finseq\_1\ X0\ X1\ X2)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.v1\_finseq\_1\ (k11\_finseq\_1\ X0\ X1\ X2) \tag{4}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow ((v1\_matrix\_1\ X0) \Leftrightarrow (\exists X1.(v7\_ordinal1\ X1) \wedge (\forall X2.\neg(X2 \in k10\_xtuple\_0\ X0) \wedge (\forall X3.((v1\_relat\_1\ X3) \wedge ((v1\_funct\_1\ X3) \wedge (v1\_finseq\_1\ X3))) \Rightarrow (\neg(X3 = X2) \wedge (k3\_finseq\_1\ X3 = X1))))))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(X3 = k1\_enumset1\ X0\ X1\ X2) \Leftrightarrow (\forall X4.(X4 \in X3) \Leftrightarrow (\neg(X4 \neq X0) \wedge ((X4 \neq X1) \wedge (X4 \neq X2)))) \tag{6}$$

Assume the following.

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

**Theorem 1**

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1)))\Rightarrow(\forall X2.((v1\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_finseq\_1\ X2)))\Rightarrow(\forall X3.((v1\_relat\_1\ X3)\wedge((v1\_funct\_1\ X3)\wedge(v1\_finseq\_1\ X3)))\Rightarrow(((k3\_finseq\_1\ X1 = X0)\wedge((k3\_finseq\_1\ X2 = X0)\wedge(k3\_finseq\_1\ X3 = X0)))\Rightarrow(v1\_matrix\_1\ (k11\_finseq\_1\ X1\ X2\ X3))))))$$