

## t95\_matrixr2

(TMFmB6uEuZgJbSKgMLjyyZQYqqBi8VcmWX5)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $m1\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k12\_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_matrix\_1 : \iota \Rightarrow o$  be given. Let  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $k1\_matrix\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  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  $k4\_ordinal1 : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2\_finseq\_1 X0 k1\_numbers) \Rightarrow (\forall X1.((v1\_matrix\_1 \\ & X1) \wedge (m2\_finseq\_1 X1 (k3\_finseq\_2 k1\_numbers))) \Rightarrow (\neg(\neg r1\_xxreal\_0 \\ & (k3\_finseq\_1 X1) k6\_numbers) \wedge ((\neg r1\_xxreal\_0 (k1\_matrix\_1 X1) \\ & k6\_numbers) \wedge (((k1\_matrix\_1 X1 = k3\_finseq\_1 X0) \vee (k3\_finseq\_1 \\ & (k4\_matrix\_1 k1\_numbers X1) = k3\_finseq\_1 X0)) \wedge (k11\_matrixr1 \\ & X1 X0 \neq k12\_matrixr1 (k4\_matrix\_1 k1\_numbers X1) X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0 X1) \Rightarrow ( \\ & \forall X2.(m1\_matrix\_1 X2 X1 X0 X0) \Rightarrow ((k3\_finseq\_1 X2 = X0) \wedge ((k1\_matrix\_1 \\ & X2 = X0) \wedge (k2\_matrix\_1 X2 = k2\_zfmisc\_1 (k2\_finseq\_1 X0) (k2\_finseq\_1 \\ & X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v7\_ordinal1 X0) \wedge ((\neg v1\_xboole\_0 \\ & X1) \wedge (m1\_matrix\_1 X2 X1 X0 X0))) \Rightarrow (k5\_matrix\_1 X0 X1 X2 = k4\_matrix\_1 \\ & X1 X2) \end{aligned} \quad (4)$$

Assume the following.

$$\neg v1\_xboole\_0 \ k1\_numbers \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0 \ X0) \wedge ((v7\_ordinal1 \\ & X1) \wedge (v7\_ordinal1 \ X2))) \Rightarrow (\forall X3. (m1\_matrix\_1 \ X3 \ X0 \ X1 \ X2) \Rightarrow \\ & ((v1\_matrix\_1 \ X3) \wedge (m2\_finseq\_1 \ X3 \ (k3\_finseq\_2 \ X0)))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \ X0 \ k4\_ordinal1) \Rightarrow (v7\_ordinal1 \ X0) \quad (7)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (m1\_subset\_1 \ X0 \ k5\_numbers) \Rightarrow (\forall X1. (m2\_finseq\_1 \\ & X1 \ k1\_numbers) \Rightarrow (\forall X2. (m1\_matrix\_1 \ X2 \ k1\_numbers \ X0 \ X0) \Rightarrow \\ & ((k3\_finseq\_1 \ X1 = X0) \Rightarrow ((r1\_xxreal\_0 \ X0 \ k6\_numbers) \vee (k12\_matrixr1 \\ & (k5\_matrix\_1 \ X0 \ k1\_numbers \ X2) \ X1 = k11\_matrixr1 \ X2 \ X1)))))) \end{aligned}$$