

## t26\_matrixr1

(TMHiQYUKZSsA1uRaWBMcGUFXQ3vspTUVjXM)

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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  $k1\_numbers : \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_matrix\_1 : \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  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. Let  $k7\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_matrixr1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_matrix\_1 X1) \wedge (m2\_finseq\_1 X1 (k3\_finseq\_2 \\ & X0))) \Rightarrow (\forall X2. ((v1\_matrix\_1 X2) \wedge (m2\_finseq\_1 X2 (k3\_finseq\_2 \\ & X0))) \Rightarrow (((k3\_finseq\_1 X1 = k3\_finseq\_1 X2) \wedge (k1\_matrix\_1 X1 = k1\_matrix\_1 \\ & X2)) \Rightarrow (k2\_matrix\_1 X1 = k2\_matrix\_1 X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_matrix\_1 X0) \wedge (m2\_finseq\_1 X0 (k3\_finseq\_2 k1\_numbers))) \Rightarrow \\ & (\forall X1. ((v1\_matrix\_1 X1) \wedge (m2\_finseq\_1 X1 (k3\_finseq\_2 k1\_numbers))) \Rightarrow \\ & ((k3\_finseq\_1 (k3\_matrixr1 X0 X1) = k3\_finseq\_1 X0) \wedge ((k1\_matrix\_1 \\ & (k3\_matrixr1 X0 X1) = k1\_matrix\_1 X0) \wedge (\forall X2. (v7\_ordinal1 \\ & X2) \Rightarrow (\forall X3. (v7\_ordinal1 X3) \Rightarrow ((k4\_tarski X2 X3 \in k2\_matrix\_1 \\ & X0) \Rightarrow (k3\_matrix\_1 k1\_numbers (k3\_matrixr1 X0 X1) X2 X3 = k7\_real\_1 \\ & (k3\_matrix\_1 k1\_numbers X0 X2 X3) (k3\_matrix\_1 k1\_numbers X1 X2 \\ & X3)))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((v1\_matrix\_1 X1) \wedge \\ & (m2\_finseq\_1 X1 (k3\_finseq\_2 X0))) \Rightarrow (\forall X2. ((v1\_matrix\_1 \\ & X2) \wedge (m2\_finseq\_1 X2 (k3\_finseq\_2 X0))) \Rightarrow (((k3\_finseq\_1 X1 = k3\_finseq\_1 \\ & X2) \wedge ((k1\_matrix\_1 X1 = k1\_matrix\_1 X2) \wedge (\forall X3. (v7\_ordinal1 \\ & X3) \Rightarrow (\forall X4. (v7\_ordinal1 X4) \Rightarrow ((k4\_tarski X3 X4 \in k2\_matrix\_1 \\ & X1) \Rightarrow (k3\_matrix\_1 X0 X1 X3 X4 = k3\_matrix\_1 X0 X2 X3 X4)))))) \Rightarrow (X1 = \\ & X2)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0)\Leftrightarrow(m1\_finseq\_1 X1 X0) \quad (4)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v1\_matrix\_1 X0)\wedge(m1\_finseq\_1 X0 (k3\_finseq\_2 \\ k1\_numbers)))\wedge((v1\_matrix\_1 X1)\wedge(m1\_finseq\_1 X1 (k3\_finseq\_2 \\ k1\_numbers))))\Rightarrow((v1\_matrix\_1 (k3\_matrixr1 X0 X1))\wedge(m2\_finseq\_1 \\ (k3\_matrixr1 X0 X1) (k3\_finseq\_2 k1\_numbers))) \end{aligned} \quad (6)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v1\_matrix\_1 X0)\wedge(m2\_finseq\_1 X0 (k3\_finseq\_2 k1\_numbers)))\Rightarrow \\ (\forall X1.((v1\_matrix\_1 X1)\wedge(m2\_finseq\_1 X1 (k3\_finseq\_2 k1\_numbers)))\Rightarrow \\ (\forall X2.((v1\_matrix\_1 X2)\wedge(m2\_finseq\_1 X2 (k3\_finseq\_2 k1\_numbers)))\Rightarrow \\ (((k3\_finseq\_1 X2 = k3\_finseq\_1 X0)\wedge((k1\_matrix\_1 X2 = k1\_matrix\_1 \\ X0)\wedge(\forall X3.(v7\_ordinal1 X3)\Rightarrow(\forall X4.(v7\_ordinal1 X4)\Rightarrow \\ ((k4\_tarski X3 X4 \in k2\_matrix\_1 X0)\Rightarrow(k3\_matrix\_1 k1\_numbers X2 \\ X3 X4 = k7\_real\_1 (k3\_matrix\_1 k1\_numbers X0 X3 X4) (k3\_matrix\_1 \\ k1\_numbers X1 X3 X4))))))\Rightarrow(X2 = k3\_matrixr1 X0 X1)))) \end{aligned}$$