

## t11\_matrix\_2

(TMN5nwUxe8G45aXapoH5C5JS9u2xKyDv5Tp)

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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  $k4\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_matrix\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.((v1\_matrix\_1 X1) \wedge \\ (m2\_finseq\_1 X1 (k3\_finseq\_2 X0))) \Rightarrow (\forall X2.((v1\_matrix\_1 \\ X2) \wedge (m2\_finseq\_1 X2 (k3\_finseq\_2 X0))) \Rightarrow (((k4\_matrix\_1 X0 X1 = \\ k4\_matrix\_1 X0 X2) \wedge (k3\_finseq\_1 X1 = k3\_finseq\_1 X2)) \Rightarrow (X1 = X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.((v1\_matrix\_1 X1) \wedge \\ (m2\_finseq\_1 X1 (k3\_finseq\_2 X0))) \Rightarrow ((\neg r1\_xxreal\_0 (k1\_matrix\_1 \\ X1) k6\_numbers) \Rightarrow ((k3\_finseq\_1 (k4\_matrix\_1 X0 X1) = k1\_matrix\_1 \\ X1) \wedge (k1\_matrix\_1 (k4\_matrix\_1 X0 X1) = k3\_finseq\_1 X1)))))) \end{aligned} \quad (2)$$

### Theorem 1

$$\begin{aligned} \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.((v1\_matrix\_1 X1) \wedge \\ (m2\_finseq\_1 X1 (k3\_finseq\_2 X0))) \Rightarrow (\forall X2.((v1\_matrix\_1 \\ X2) \wedge (m2\_finseq\_1 X2 (k3\_finseq\_2 X0))) \Rightarrow ((k4\_matrix\_1 X0 X1 = k4\_matrix\_1 \\ X0 X2) \Rightarrow ((r1\_xxreal\_0 (k1\_matrix\_1 X1) k6\_numbers) \vee ((r1\_xxreal\_0 \\ (k1\_matrix\_1 X2) k6\_numbers) \vee (X1 = X2))))))) \end{aligned}$$