

# t6\_matrix\_1 (TMc- STJ5m5Ndh1Mo33HdTBxT6R4SaAyMsGMq)

October 27, 2020

Let  $v1\_matrix\_1 : \iota \Rightarrow o$  be given. Let  $k10\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  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  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge (( \\ v1\_funct\_1\ X1) \wedge (v1\_finseq\_1\ X1))) \Rightarrow (\forall X2.((v1\_relat\_1 \\ X2) \wedge ((v1\_funct\_1\ X2) \wedge (v1\_finseq\_1\ X2))) \Rightarrow (((k3\_finseq\_1\ X1 = \\ X0) \wedge (k3\_finseq\_1\ X2 = X0)) \Rightarrow (v1\_matrix\_1\ (k10\_finseq\_1\ X1\ X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$k1\_card\_1\ k1\_xboole\_0 = k1\_xboole\_0 \quad (2)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow (k3\_finseq\_1\ X0 = k1\_card\_1\ X0) \quad (3)$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (v7\_ordinal1\ X0) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (v1\_relat\_1\ X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (v1\_funct\_1\ X0) \quad (7)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_xboole\_0\ X0)) \Rightarrow ((v1\_relat\_1\ X0) \wedge (v1\_finseq\_1\ X0)) \quad (8)$$

**Theorem 1**  $v1\_matrix\_1\ (k10\_finseq\_1\ k1\_xboole\_0\ k1\_xboole\_0)$ .