

# t29\_matrix\_7 (TMRkbbmJ- SUU8EfMXWTmwJYnsHiQfts7zjts)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v6\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v33\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v3\_group\_1 : \iota \Rightarrow o$  be given. Let  $v5\_group\_1 : \iota \Rightarrow o$  be given. Let  $v2\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v5\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $l6\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $m1\_matrix\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k12\_matrix\_2 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k14\_matrix\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_matrix\_7 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v5\_matrix\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k11\_matrix\_2 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_matrix\_2 : \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k4\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_matrix\_2 \\ X1 (k12\_matrix\_2 X0)) \Rightarrow ((r1\_xxreal\_0 np\_1 X0) \Rightarrow ((v5\_matrix\_2 \\ X1 (k11\_matrix\_2 (k12\_matrix\_2 X0))) \Leftrightarrow (v5\_matrix\_2 (k3\_matrix\_7 \\ X0 X1) (k11\_matrix\_2 (k12\_matrix\_2 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v3\_matrix\_2 X0)) \Rightarrow (\forall X1. \\ (m1\_matrix\_2 X1 X0) \Leftrightarrow (m1\_subset\_1 X1 X0)) \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow ((\neg v1\_xboole\_0 (k12\_matrix\_2 X0)) \wedge \\ (v3\_matrix\_2 (k12\_matrix\_2 X0))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1 X0) \wedge (m1\_subset\_1 X1 (k12\_matrix\_2 \\ X0))) \Rightarrow (m1\_matrix\_2 (k3\_matrix\_7 X0 X1) (k12\_matrix\_2 X0)) \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge ((\neg v6\_struct\_0 X0) \wedge ((v13\_algstr\_0 \\
& X0) \wedge ((v33\_algstr\_0 X0) \wedge ((v3\_group\_1 X0) \wedge ((v5\_group\_1 X0) \wedge ( \\
& (v2\_rlvect\_1 X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v4\_vectsp\_1 \\
& X0) \wedge ((v5\_vectsp\_1 X0) \wedge (l6\_algstr\_0 X0)))))))))) \Rightarrow (\forall X1. \\
& (v7\_ordinal1 X1) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow \\
& (\forall X3.(m1\_matrix\_2 X3 (k12\_matrix\_2 X1)) \Rightarrow ((v5\_matrix\_2 \\
& X3 (k11\_matrix\_2 (k12\_matrix\_2 X1)) \Rightarrow (k14\_matrix\_2 X0 X1 X2 X3 = \\
& X2)) \wedge ((\neg v5\_matrix\_2 X3 (k11\_matrix\_2 (k12\_matrix\_2 X1)) \Rightarrow (k14\_matrix\_2 \\
& X0 X1 X2 X3 = k4\_algstr\_0 X0 X2))))))
\end{aligned} \tag{6}$$

Assume the following.

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

**Theorem 1**

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.((\neg v2\_struct\_0 \\
& X1) \wedge ((\neg v6\_struct\_0 X1) \wedge ((v13\_algstr\_0 X1) \wedge ((v33\_algstr\_0 X1) \wedge \\
& ((v3\_group\_1 X1) \wedge ((v5\_group\_1 X1) \wedge ((v2\_rlvect\_1 X1) \wedge ((v3\_rlvect\_1 \\
& X1) \wedge ((v4\_rlvect\_1 X1) \wedge ((v4\_vectsp\_1 X1) \wedge ((v5\_vectsp\_1 X1) \wedge \\
& (l6\_algstr\_0 X1)))))))))) \Rightarrow (\forall X2.(m1\_matrix\_2 X2 (k12\_matrix\_2 \\
& X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 X1)) \Rightarrow ((r1\_xxreal\_0 \\
& np\_1 X0) \Rightarrow (k14\_matrix\_2 X1 X0 X3 X2 = k14\_matrix\_2 X1 X0 X3 (k3\_matrix\_7 \\
& X0 X2))))))
\end{aligned}$$