

## t11\_matrix\_6

(TMa5kbvqb8bYJbYVvQwDvwasJSCpG7ZmePg)

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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  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k5\_matrix\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k12\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_matrix\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge \\ ((\neg v6\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v33\_algstr\_0\ X1) \wedge \\ (v3\_group\_1\ X1) \wedge ((v5\_group\_1\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1 \\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v4\_vectsp\_1\ X1) \wedge ((v5\_vectsp\_1\ X1) \wedge \\ (l6\_algstr\_0\ X1)))))))))) \Rightarrow ((k5\_matrix\_6\ X0\ X1\ (k12\_matrix\_1 \\ X1\ X0) = k12\_matrix\_1\ X1\ X0) \wedge (v1\_matrix\_6\ (k12\_matrix\_1\ X1\ X0)\ X0 \\ X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge \\ ((\neg v6\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v33\_algstr\_0\ X1) \wedge \\ (v3\_group\_1\ X1) \wedge ((v5\_group\_1\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1 \\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v4\_vectsp\_1\ X1) \wedge ((v5\_vectsp\_1\ X1) \wedge \\ (l6\_algstr\_0\ X1)))))))))) \Rightarrow (k5\_matrix\_1\ X0\ (u1\_struct\_0\ X1) \\ (k12\_matrix\_1\ X1\ X0) = k12\_matrix\_1\ X1\ X0)) \end{aligned} \tag{2}$$

### Theorem 1

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0\ X0) \wedge ((\neg v6\_struct\_0\ X0) \wedge ((v13\_algstr\_0 \\ X0) \wedge ((v33\_algstr\_0\ X0) \wedge ((v3\_group\_1\ X0) \wedge ((v5\_group\_1\ X0) \wedge \\ (v2\_rlvect\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v4\_vectsp\_1 \\ X0) \wedge ((v5\_vectsp\_1\ X0) \wedge (l6\_algstr\_0\ X0)))))))))) \Rightarrow (\forall X1. \\ (v7\_ordinal1\ X1) \Rightarrow (k5\_matrix\_6\ X1\ X0\ (k5\_matrix\_1\ X1\ (u1\_struct\_0 \\ X0)\ (k12\_matrix\_1\ X0\ X1)) = k12\_matrix\_1\ X0\ X1)) \end{aligned}$$