

## t29\_vectsp\_1

(TMVofhaNCmDBxB05qLSSZFL94Rvxozfh6r8)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $l2\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v3\_rlvect\_1 \\
 & X0) \wedge ((v4\_rlvect\_1 X0) \wedge (l2\_algstr\_0 X0)))))) \Rightarrow (\forall X1. (m1\_subset\_1 \\
 & X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 \\
 & X0)) \Rightarrow (((k1\_algstr\_0 X0 X1 (k4\_algstr\_0 X0 X2) = k4\_struct\_0 X0) \Rightarrow \\
 & (X1 = X2)) \wedge (((X1 = X2) \Rightarrow (k1\_algstr\_0 X0 X1 (k4\_algstr\_0 X0 X2) = k4\_struct\_0 \\
 & X0)) \wedge (((k5\_algstr\_0 X0 X1 X2 = k4\_struct\_0 X0) \Rightarrow (X1 = X2)) \wedge ((X1 = \\
 & X2) \Rightarrow (k5\_algstr\_0 X0 X1 X2 = k4\_struct\_0 X0))))))
 \end{aligned} \tag{1}$$

### Theorem 1

$$\begin{aligned}
 & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v3\_rlvect\_1 \\
 & X0) \wedge ((v4\_rlvect\_1 X0) \wedge (l2\_algstr\_0 X0)))))) \Rightarrow (\forall X1. (m1\_subset\_1 \\
 & X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 \\
 & X0)) \Rightarrow ((k5\_algstr\_0 X0 X1 X2 = k4\_struct\_0 X0) \Rightarrow (k5\_algstr\_0 X0 X2 \\
 & X1 = k4\_struct\_0 X0))))
 \end{aligned}$$