

t72\_fvsum\_1  
(TMLNA3E1HuQhvtChYwiL72x2ML5faqbn4is)

October 27, 2020

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  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_matrix\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k5\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_algstr\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 \\ X0) \wedge (l2\_algstr\_0 X0)))) \Rightarrow (\forall X1.(m2\_finseq\_1 X1 (u1\_struct\_0 \\ X0)) \Rightarrow (\forall X2.(m2\_finseq\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (k4\_rlvect\_1 \\ X0 (k8\_finseq\_1 (u1\_struct\_0 X0) X1 X2) = k1\_algstr\_0 X0 (k4\_rlvect\_1 \\ X0 X1) (k4\_rlvect\_1 X0 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (k4\_matrix\_2 X0 X1 = k5\_finseq\_1 X1) \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (k12\_finseq\_1 X0 X1 = k5\_finseq\_1 X1) \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v3\_rlvect\_1 \\ X0) \wedge ((v4\_rlvect\_1 X0) \wedge (l2\_algstr\_0 X0)))) \Rightarrow (\forall X1.(m1\_subset\_1 \\ X1 (u1\_struct\_0 X0)) \Rightarrow (k4\_rlvect\_1 X0 (k12\_finseq\_1 (u1\_struct\_0 \\ X0) X1) = X1)) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\neg v1\_xboole\_0 (u1\_struct\_0 X0)) \tag{5}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0 X0) \Rightarrow ((l2\_struct\_0 X0) \wedge (l1\_algstr\_0 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l1\_algstr\_0 X0) \Rightarrow (l1\_struct\_0 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (m2\_finseq\_1 (k12\_finseq\_1 X0 X1) X0) \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v3\_rlvect\_1 \\ & X0) \wedge ((v4\_rlvect\_1 X0) \wedge (l2\_algstr\_0 X0)))))) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(m2\_finseq\_1 X2 (u1\_struct\_0 \\ & X0)) \Rightarrow (k4\_rlvect\_1 X0 (k8\_finseq\_1 (u1\_struct\_0 X0) (k4\_matrix\_2 \\ & (u1\_struct\_0 X0) X1) X2) = k1\_algstr\_0 X0 X1 (k4\_rlvect\_1 X0 X2)))) \end{aligned}$$