

t15\_scmfsa10  
(TMcy7t1akz826ZmVe9KE5jS84CT3K9NdfkE)

October 27, 2020

Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v1\_ami\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_scmfsa\_2 : \iota$  be given. Let  $k5\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k12\_scmfsa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xtuple\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_7 : \iota$  be given. Let  $k9\_finseq\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow \\ & (\forall X1.(m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow (k12\_scmfsa\_2 \\ & X1 X0 = k3\_xtuple\_0 np\_7 (k12\_finseq\_1 k5\_numbers X1) (k9\_finseq\_1 \\ & X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k5\_xtuple\_0 (k3\_xtuple\_0 X0 X1 X2) = X1 \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers) \Rightarrow (\forall X1. \\ & ((v1\_ami\_2 X1) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow \\ & (k5\_xtuple\_0 (k12\_scmfsa\_2 X0 X1) = k12\_finseq\_1 k5\_numbers X0)) \end{aligned}$$