

t2\_group\_2  
(TMF7Lt9XTRpGd3MvxQdHADUKY44BLmJvWwp)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_group\_1 : \iota \Rightarrow o$  be given. Let  $v3\_group\_1 : \iota \Rightarrow o$  be given. Let  $l3\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_group\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_group\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_group\_1 X0) \wedge ((v3\_group\_1 \\ X0) \wedge (l3\_algstr\_0 X0)))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \Rightarrow (k1\_group\_2 X0 X1 = ReplSep (toset (\lambda X2 : \\ \iota.m1\_subset\_1 X2 (u1\_struct\_0 X0))) (\lambda X2 : \iota.X2 \in X1) (\lambda X2 : \\ \iota.k2\_group\_1 X0 X2)))) \end{aligned} \quad (1)$$

**Theorem 1**

$$\begin{aligned} \forall X0.\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v2\_group\_1 X1) \wedge \\ (v3\_group\_1 X1) \wedge (l3\_algstr\_0 X1))) \Rightarrow (\forall X2.(m1\_subset\_1 \\ X2 (k1\_zfmisc\_1 (u1\_struct\_0 X1))) \Rightarrow ((X0 \in k1\_group\_2 X1 X2) \Leftrightarrow (\exists X3. \\ (m1\_subset\_1 X3 (u1\_struct\_0 X1)) \wedge ((X0 = k2\_group\_1 X1 X3) \wedge (X3 \in \\ X2)))))) \end{aligned}$$