

# t7\_scmfsa8a (TMMdwixGVd- hThDZXEg34JKnfA1QxbsaC41x)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_scmfsa\_2 : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_scmfsa6a : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_scmfsa\_2 : \iota \Rightarrow \iota$  be given. Let  $k6\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow (\forall X2. \\ & \forall X3. ((X0 \in k9\_xtuple\_0 X1) \wedge (k1\_funct\_1 X1 X0 = X2)) \Rightarrow (k1\_funct\_1 \\ & (k6\_funct\_4 X1 X2 X3) X0 = X3)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow (\forall X2. \\ & \forall X3. (k1\_funct\_1 X1 X0 \neq X2) \Rightarrow (k1\_funct\_1 (k6\_funct\_4 X1 X2 \\ & X3) X0 = k1\_funct\_1 X1 X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v5\_relat\_1 \\ & X0 (u1\_compos\_1 k1\_scmfsa\_2)) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finset\_1 \\ & X0)))))) \Rightarrow (\forall X1. (m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow \\ & (k1\_scmfsa6a X0 X1 = k6\_funct\_4 X0 (k2\_compos\_1 k1\_scmfsa\_2) (k11\_scmfsa\_2 \\ & X1))) \end{aligned} \quad (3)$$

## Theorem 1

$$\begin{aligned} & \forall X0. ((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v5\_relat\_1 \\ & X0 (u1\_compos\_1 k1\_scmfsa\_2)) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finset\_1 \\ & X0)))))) \Rightarrow (\forall X1. (m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow \\ & (\forall X2. (X2 \in k9\_xtuple\_0 X0) \Rightarrow (((k1\_funct\_1 X0 X2 = k2\_compos\_1 \\ & k1\_scmfsa\_2) \Rightarrow (k1\_funct\_1 (k1\_scmfsa6a X0 X1) X2 = k11\_scmfsa\_2 \\ & X1)) \wedge ((k1\_funct\_1 X0 X2 \neq k2\_compos\_1 k1\_scmfsa\_2) \Rightarrow (k1\_funct\_1 \\ & (k1\_scmfsa6a X0 X1) X2 = k1\_funct\_1 X0 X2)))))) \end{aligned}$$