

## t4\_scmfsa9a

(TMa8uLEr1GYDbQqiGA9WQPoPxxvkFjfmscFH)

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Let  $k4\_sf\_mastr : \iota \Rightarrow \iota$  be given. Let  $k4\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_scmfsa\_2 : \iota$  be given. Let  $k1\_xboole\_0 : \iota$  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  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $u1\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_scmfsa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_scmfsa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_scmfsa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_scmfsa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_scmfsa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_scmfsa\_2 : \iota \Rightarrow \iota$  be given. Let  $k12\_scmfsa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k13\_scmfsa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_sf\_mastr : \iota \Rightarrow \iota$  be given. Let  $k16\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $l1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_compos\_1 : \iota \Rightarrow o$  be given. Let  $v1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_3 : \iota$  be given. Let  $k7\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k3\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow \\
 & (\forall X1.((v1\_ami\_2 X1) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow \\
 & (\forall X2.(m2\_subset\_1 X2 k1\_numbers k5\_numbers) \Rightarrow (\forall X3. \\
 & (m1\_subset\_1 X3 (u1\_compos\_1 k1\_scmfsa\_2)) \Rightarrow ((\neg(X3 \neq k2\_compos\_1 \\
 & k1\_scmfsa\_2) \wedge ((X3 \neq k6\_scmfsa\_2 X0 X1) \wedge ((X3 \neq k7\_scmfsa\_2 X0 X1) \wedge \\
 & ((X3 \neq k8\_scmfsa\_2 X0 X1) \wedge ((X3 \neq k9\_scmfsa\_2 X0 X1) \wedge ((X3 \neq k10\_scmfsa\_2 \\
 & X0 X1) \wedge ((X3 \neq k11\_scmfsa\_2 X2) \wedge ((X3 \neq k12\_scmfsa\_2 X2 X0) \wedge (X3 \neq k13\_scmfsa\_2 \\
 & X2 X0)))))))))) \Rightarrow (k3\_sf\_mastr X3 = k1\_xboole\_0))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers) \Rightarrow (\forall X1. \\
 & (m1\_subset\_1 X1 (u1\_compos\_1 k1\_scmfsa\_2)) \Rightarrow (k4\_sf\_mastr (k16\_funcop\_1 \\
 & X0 X1) = k3\_sf\_mastr X1))
 \end{aligned} \tag{2}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{3}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (4)$$

Assume the following.

$$\exists X0.(m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmfsa\_2)) \wedge (v1\_ami\_2 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(l1\_extpro\_1 X1 X0) \Rightarrow ((l1\_memstr\_0 X1 X0) \wedge (l1\_compos\_1 X1)) \quad (6)$$

Assume the following.

$$m2\_subset\_1 k6\_numbers k1\_numbers k5\_numbers \quad (7)$$

Assume the following.

$$\forall X0.(l1\_compos\_1 X0) \Rightarrow (m1\_subset\_1 (k2\_compos\_1 X0) (u1\_compos\_1 X0)) \quad (8)$$

Assume the following.

$$(v1\_extpro\_1 k1\_scmfsa\_2 np\_3) \wedge (l1\_extpro\_1 k1\_scmfsa\_2 np\_3) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.k16\_funcop\_1 X0 X1 = k7\_funcop\_1 (k1\_tarski X0) X1 \quad (10)$$

Assume the following.

$$\forall X0.k3\_afinsq\_1 X0 = k16\_funcop\_1 k6\_numbers X0 \quad (11)$$

Assume the following.

$$\forall X0.(l1\_compos\_1 X0) \Rightarrow (k4\_compos\_1 X0 = k3\_afinsq\_1 (k2\_compos\_1 X0)) \quad (12)$$

**Theorem 1**  $k4\_sf\_mastr (k4\_compos\_1 k1\_scmfsa\_2) = k1\_xboole\_0.$