

t56\_scmfsa8c  
(TMUQKKznKDNTYrF6StTjy9iNeieaduD2CCr)

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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  $r4\_scmfsa7b : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $r3\_scmfsa7b : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v5\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k5\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k3\_afinsq\_1 : \iota \Rightarrow \iota$  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  $v7\_amistd\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_3 : \iota$  be given. Let  $v1\_scmfsa7b : \iota \Rightarrow o$  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. Assume the following.

$$\forall X0.((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow (\neg r3\_scmfsa7b (k2\_compos\_1 k1\_scmfsa\_2) X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge ((v5\_ordinal1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finset\_1 X1)))) \Rightarrow ((X1 = k5\_afinsq\_1 X0) \Leftrightarrow ((k2\_afinsq\_1 X1 = np\_1) \wedge (k10\_xtuple\_0 X1 = k1\_tarski X0))) \quad (2)$$

Assume the following.

$$\forall X0. k5\_afinsq\_1 X0 = k3\_afinsq\_1 X0 \quad (3)$$

Assume the following.

$$\forall X0. (v5\_ordinal1 (k3\_afinsq\_1 X0)) \wedge (v1\_finset\_1 (k3\_afinsq\_1 X0)) \quad (4)$$

Assume the following.

$$(v1\_relat\_1 (k4\_compos\_1 k1\_scmfsa\_2)) \wedge ((v4\_relat\_1 (k4\_compos\_1 k1\_scmfsa\_2) k5\_numbers) \wedge ((v5\_relat\_1 (k4\_compos\_1 k1\_scmfsa\_2) (u1\_compos\_1 k1\_scmfsa\_2)) \wedge ((v1\_funct\_1 (k4\_compos\_1 k1\_scmfsa\_2)) \wedge ((v1\_finset\_1 (k4\_compos\_1 k1\_scmfsa\_2)) \wedge ((v7\_amistd\_1 (k4\_compos\_1 k1\_scmfsa\_2) np\_3 k1\_scmfsa\_2) \wedge (v1\_scmfsa7b (k4\_compos\_1 k1\_scmfsa\_2)))))))))) \quad (5)$$

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.

$$\forall X0. (v1\_relat\_1 (k5\_afinsq\_1 X0)) \wedge (v1\_funct\_1 (k5\_afinsq\_1 X0)) \quad (7)$$

Assume the following.

$$(v1\_extpro\_1 k1\_scmfsa\_2 np\_3) \wedge (l1\_extpro\_1 k1\_scmfsa\_2 np\_3) \quad (8)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v5\_relat\_1 X0 (u1\_compos\_1 k1\_scmfsa\_2)) \wedge (v1\_funct\_1 X0)))) \Rightarrow (\forall X1. ((v1\_ami\_2 X1) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow ((r4\_scmfsa7b X0 X1) \Leftrightarrow (\exists X2. (m1\_subset\_1 X2 (u1\_compos\_1 k1\_scmfsa\_2)) \wedge ((X2 \in k10\_xtuple\_0 X0) \wedge (r3\_scmfsa7b X2 X1)))))) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (10)$$

Assume the following.

$$\forall X0. (l1\_compos\_1 X0) \Rightarrow (k4\_compos\_1 X0 = k3\_afinsq\_1 (k2\_compos\_1 X0)) \quad (11)$$

**Theorem 1**

$$\forall X0. ((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow (\neg r4\_scmfsa7b (k4\_compos\_1 k1\_scmfsa\_2) X0)$$