# l47_scmpds_2 (TMQ7GBEbkGDaYU2kNvQYvXPbE7prdP5smbn)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_compos\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_scmpds\_2 : \iota$ be given. Let $k7\_card\_1 : \iota \Rightarrow \iota$ be given. Let $np\_\_15 : \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_ami\_2 : \iota$ be given. Let $k2\_ami\_2 : \iota$ be given. Let $k4\_numbers : \iota$ be given. Let $k3\_xtuple\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k11\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_4 : \iota$ be given. Let $np\_\_5 : \iota$ be given. Let $np\_\_6 : \iota$ be given. Let $np\_\_7 : \iota$ be given. Let $np\_\_8 : \iota$ be given. Let $k2\_compos\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_compos\_0 : \iota \Rightarrow o$ be given. Let $k4\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_compos\_1 : \iota \Rightarrow o$ be given. Let $v2\_compos\_0 : \iota \Rightarrow o$ be given. Let $v3\_compos\_0 : \iota \Rightarrow o$ be given. Let $v5\_compos\_0 : \iota \Rightarrow o$ 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 $v1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_2 : \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(((\neg v1\_xboole\_0\ X0) \wedge (v1\_compos\_0\ X0)) \wedge (m1\_subset\_1\ X1\ X0)) \Rightarrow (k2\_compos\_0\ X0\ X1 = k4\_xtuple\_0\ X1) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.k1\_xtuple\_0\ (k4\_tarski\ X0\ X1) = X0 \tag{2}$$

Assume the following.

$$\forall X0.(l1\_compos\_1\ X0) \Rightarrow ((v1\_compos\_0\ (u1\_compos\_1\ X0)) \wedge ((v2\_compos\_0\ (u1\_compos\_1\ X0)) \wedge ((v3\_compos\_0\ (u1\_compos\_1\ X0)) \wedge (v5\_compos\_0\ (u1\_compos\_1\ X0))))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(l1\_extpro\_1\ X1\ X0) \Rightarrow ((l1\_memstr\_0\ X1\ X0) \wedge (l1\_compos\_1\ X1)) \tag{4}$$

Assume the following.

$$(v1\_extpro\_1\ k1\_scmpds\_2\ np\_\_2) \wedge (l1\_extpro\_1\ k1\_scmpds\_2\ np\_\_2) \tag{5}$$

Assume the following.

$$\forall X0.k4\_xtuple\_0\ X0 = k1\_xtuple\_0\ (k1\_xtuple\_0\ X0) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3\_xtuple\_0\ X0\ X1\ X2 = k4\_tarski\ (k4\_tarski\ X0\ X1)\ X2 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.\ (X5 = k3\_enumset1\ X0\ X1\ X2\ X3\ X4) \Leftrightarrow (\forall X6.(X6 \in X5) \Leftrightarrow (\neg(X6 \neq X0) \wedge ((X6 \neq X1) \wedge ((X6 \neq X2) \wedge ((X6 \neq X3) \wedge (X6 \neq X4))))))) \tag{8}$$

Assume the following.

$$\forall X0.(v5\_compos\_0\ X0) \Rightarrow (\neg v1\_xboole\_0\ X0) \tag{9}$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_compos\_1\ k1\_scmpds\_2)) \Rightarrow (\neg(X0 \in ReplSep4\ (toset\ (\lambda X1 : \iota.m1\_subset\_1\ X1\ (k7\_card\_1\ np\_\_15)))\ (\lambda X1 : \iota.toset\ (\lambda X2 : \iota.m2\_subset\_1\ X2\ k1\_ami\_2\ k2\_ami\_2))\ (\lambda X1 : \iota.\lambda X2 : \iota.toset\ (\lambda X3 : \iota.m1\_subset\_1\ X3\ k4\_numbers))\ (\lambda X1 : \iota.\lambda X2 : \iota.\lambda X3 : \iota.toset\ (\lambda X4 : \iota.m1\_subset\_1\ X4\ k4\_numbers))\ (\lambda X1 : \iota.\lambda X2 : \iota.\lambda X3 : \iota.\lambda X4 : \iota.X1 \in k3\_enumset1\ np\_\_4\ np\_\_5\ np\_\_6\ np\_\_7\ np\_\_8)\ (\lambda X1 : \iota.\lambda X2 : \iota.\lambda X3 : \iota.\lambda X4 : \iota.k3\_xtuple\_0\ X1\ k1\_xboole\_0\ (k11\_finseq\_1\ X2\ X3\ X4))) \wedge ((k2\_compos\_0\ (u1\_compos\_1\ k1\_scmpds\_2)\ X0 \neq np\_\_4) \wedge ((k2\_compos\_0\ (u1\_compos\_1\ k1\_scmpds\_2)\ X0 \neq np\_\_5) \wedge ((k2\_compos\_0\ (u1\_compos\_1\ k1\_scmpds\_2)\ X0 \neq np\_\_6) \wedge ((k2\_compos\_0\ (u1\_compos\_1\ k1\_scmpds\_2)\ X0 \neq np\_\_7) \wedge (k2\_compos\_0\ (u1\_compos\_1\ k1\_scmpds\_2)\ X0 \neq np\_\_8))))))$$