t76_scmfsa_2 (TMTm9zYvJWRAsAR21Rve7Z5fVD6tQUQgYeE)

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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 $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_scmfsa\_2 : \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v5\_funct\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_3 : \iota$ be given. Let $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_card\_3 : \iota \Rightarrow \iota$ be given. Let $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_scmfsa\_1 : \iota$ be given. Let $k5\_scmfsa\_1 : \iota$ be given. Let $k5\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_scmfsa\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v3\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1\_setfam\_1 : \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$k4\_struct\_0\ k1\_scmfsa\_2 = k5\_numbers \tag{1}$$

Assume the following.

$$\begin{gathered}((v2\_xxreal\_0\ np\_\_3) \wedge (m2\_subset\_1\ np\_\_3\ k1\_numbers\ k5\_numbers)) \wedge \\ ((m1\_subset\_1\ np\_\_3\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_3\ k1\_numbers))\end{gathered} \tag{2}$$

Assume the following.

$$\neg v1\_xboole\_0\ np\_\_3 \tag{3}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{4}$$

Assume the following.

$$(v3\_memstr\_0\ k1\_scmfsa\_2\ np\_\_3) \wedge (v1\_extpro\_1\ k1\_scmfsa\_2\ np\_\_3) \tag{5}$$

Assume the following.

$$(\neg v2\_struct\_0\ k1\_scmfsa\_2)\wedge((v2\_memstr\_0\ k1\_scmfsa\_2\ np\_\_3)\wedge (v1\_extpro\_1\ k1\_scmfsa\_2\ np\_\_3)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(l1\_extpro\_1\ X1\ X0)\Rightarrow((l1\_memstr\_0\ X1\ X0)\wedge (l1\_compos\_1\ X1)) \tag{7}$$

Assume the following.

$$(v1\_extpro\_1\ k1\_scmfsa\_2\ np\_\_3)\wedge(l1\_extpro\_1\ k1\_scmfsa\_2\ np\_\_3) \tag{8}$$

Assume the following.

$$\forall X0.(\neg v1\_setfam\_1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge ((v2\_memstr\_0\ X1\ X0)\wedge((v3\_memstr\_0\ X1\ X0)\wedge(l1\_memstr\_0\ X1\ X0))))\Rightarrow (\forall X2.((v1\_relat\_1\ X2)\wedge((v4\_relat\_1\ X2\ (u1\_struct\_0\ X1))\wedge ((v1\_funct\_1\ X2)\wedge(v5\_funct\_1\ X2\ (k2\_memstr\_0\ X0\ X1)))))\Rightarrow(k5\_memstr\_0\ X0\ X1\ X2 = k1\_funct\_1\ X2\ (k4\_struct\_0\ X1)))) \tag{9}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k4\_card\_3\ (k3\_relat\_1\ k4\_scmfsa\_1\ k5\_scmfsa\_1)))\Rightarrow(k10\_scmfsa\_1\ X0 = k1\_funct\_1\ X0\ k5\_numbers) \tag{10}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{11}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge(v7\_ordinal1\ X0))\Rightarrow((\neg v1\_xboole\_0\ X0)\wedge((v7\_ordinal1\ X0)\wedge(\neg v1\_setfam\_1\ X0))) \tag{12}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v4\_relat\_1\ X0\ (u1\_struct\_0\ k1\_scmfsa\_2))\wedge ((v1\_funct\_1\ X0)\wedge((v5\_funct\_1\ X0\ (k2\_memstr\_0\ np\_\_3\ k1\_scmfsa\_2))\wedge (v1\_partfun1\ X0\ (u1\_struct\_0\ k1\_scmfsa\_2))))))\Rightarrow(\forall X1.\ (m1\_subset\_1\ X1\ (k4\_card\_3\ (k3\_relat\_1\ k4\_scmfsa\_1\ k5\_scmfsa\_1)))\Rightarrow ((X1 = X0)\Rightarrow(k5\_memstr\_0\ np\_\_3\ k1\_scmfsa\_2\ X0 = k10\_scmfsa\_1\ X1)))$$