t5_scmpds_9 (TMdGS6v8WFmQAAP6QukFboiBgLB1vzBgo1s)

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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 $k1\_scmpds\_2 : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $k1\_amistd\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k6\_scmpds\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k5\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_scmpds\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_compos\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v6\_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ (u1\_struct\_0\ k1\_scmpds\_2)) \wedge ((v1\_funct\_1\ X0) \wedge ((v5\_funct\_1\ X0\ (k2\_memstr\_0\ np\_\_2\ k1\_scmpds\_2)) \wedge (v1\_partfun1\ X0\ (u1\_struct\_0\ k1\_scmpds\_2)))))) \Rightarrow (\forall X1.(v1\_int\_1\ X1) \Rightarrow (\forall X2.((v1\_ami\_2\ X2) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ k1\_scmpds\_2))) \Rightarrow ((k1\_funct\_1\ (k2\_extpro\_1\ np\_\_2\ k1\_scmpds\_2\ (k6\_scmpds\_2\ X2\ X1)\ X0)\ (k4\_struct\_0\ k1\_scmpds\_2) = k4\_card\_1\ (k5\_memstr\_0\ np\_\_2\ k1\_scmpds\_2\ X0)) \wedge ((k1\_funct\_1\ (k2\_extpro\_1\ np\_\_2\ k1\_scmpds\_2\ (k6\_scmpds\_2\ X2\ X1)\ X0)\ (k2\_scmpds\_2\ (k1\_funct\_1\ X0\ X2)\ X1) = k5\_memstr\_0\ np\_\_2\ k1\_scmpds\_2\ X0) \wedge (\forall X3.((v1\_ami\_2\ X3) \wedge (m1\_subset\_1\ X3\ (u1\_struct\_0\ k1\_scmpds\_2))) \Rightarrow ((k2\_scmpds\_2\ (k1\_funct\_1\ X0\ X2)\ X1 \neq X3) \Rightarrow (k1\_funct\_1\ (k2\_extpro\_1\ np\_\_2\ k1\_scmpds\_2\ (k6\_scmpds\_2\ X2\ X1)\ X0)\ X3 = k1\_funct\_1\ X0\ X3))))))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_compos\_1\ k1\_scmpds\_2))\Rightarrow(\forall X1.\ (m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow((\forall X2.((v1\_relat\_1\ X2)\wedge(\ (v4\_relat\_1\ X2\ (u1\_struct\_0\ k1\_scmpds\_2))\wedge((v1\_funct\_1\ X2)\wedge\ ((v5\_funct\_1\ X2\ (k2\_memstr\_0\ np\_\_2\ k1\_scmpds\_2))\wedge(v1\_partfun1\ X2\ (u1\_struct\_0\ k1\_scmpds\_2))))))\Rightarrow((k5\_memstr\_0\ np\_\_2\ k1\_scmpds\_2\ X2 = X1)\Rightarrow(k1\_funct\_1\ (k2\_extpro\_1\ np\_\_2\ k1\_scmpds\_2\ X0\ X2)\ (k4\_struct\_0\ k1\_scmpds\_2) = k1\_ordinal1\ (k5\_memstr\_0\ np\_\_2\ k1\_scmpds\_2\ X2))))\Rightarrow\ (k1\_amistd\_1\ np\_\_2\ k1\_scmpds\_2\ X1\ X0 = k1\_tarski\ (k1\_ordinal1\ X1))))) \tag{2}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{3}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k4\_card\_1\ X0 = k1\_ordinal1\ X0) \tag{4}$$

Assume the following.

$$v6\_membered\ k4\_ordinal1 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_ami\_2\ X0)\wedge(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_scmpds\_2)))\wedge(v1\_int\_1\ X1))\Rightarrow(m1\_subset\_1\ (k6\_scmpds\_2\ X0\ X1)\ (u1\_compos\_1\ k1\_scmpds\_2)) \tag{6}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow\ (v7\_ordinal1\ X1)) \tag{7}$$

Theorem 1

$$\forall X0.((v1\_ami\_2\ X0)\wedge(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_scmpds\_2)))\Rightarrow\ (\forall X1.(m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow(\forall X2.(v1\_int\_1\ X2)\Rightarrow(k1\_amistd\_1\ np\_\_2\ k1\_scmpds\_2\ X1\ (k6\_scmpds\_2\ X0\ X2) = k1\_tarski\ (k1\_ordinal1\ X1))))$$