

t6_scmpds_4
(TMHL6X4HnNjqQA8LRNuVunUdLXE7NwtZzZj)

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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 $k1_scmpds_2 : \iota$ 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 $np_2 : \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_ami_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_ami_2 : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k2_scm_inst : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 (u1_struct_0 k1_scmpds_2)) \wedge \\ & ((v1_funct_1 X0) \wedge ((v5_funct_1 X0 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge \\ & (v1_partfun1 X0 (u1_struct_0 k1_scmpds_2)))))) \Rightarrow (k9_xtuple_0 \\ & X0 = k2_xboole_0 (k1_tarski (k4_struct_0 k1_scmpds_2)) k2_ami_2) \end{aligned} \quad (1)$$

Assume the following.

$$k4_struct_0 k1_scmpds_2 = k5_numbers \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X0 \in k2_xboole_0 X2 (k1_tarski X1)) \Leftrightarrow ((X0 \in X2) \vee (X0 = X1)) \quad (4)$$

Assume the following.

$$k2_ami_2 = k2_scm_inst \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 X1)\Rightarrow((v4_relat_1 X1 X0)\Leftrightarrow(r1_tarski (k9_xtuple_0 X1) X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v1_ami_2 X0)\Leftrightarrow(X0 \in k2_ami_2) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_relat_1 X0)\wedge((v4_relat_1 X0 (u1_struct_0 k1_scmpds_2))\wedge \\ & ((v1_funct_1 X0)\wedge((v5_funct_1 X0 (k2_memstr_0 np_2 k1_scmpds_2))\wedge \\ & (v1_partfun1 X0 (u1_struct_0 k1_scmpds_2))))))\Rightarrow(\forall X1. \\ & \neg(X1 \in k9_xtuple_0 X0)\wedge((\neg(v1_ami_2 X1)\wedge(m1_subset_1 X1 (u1_struct_0 \\ & k1_scmpds_2)))\wedge(X1\neq k4_struct_0 k1_scmpds_2))) \end{aligned}$$