

t3_scmpds_3 (TMTSfYDUrJowbR- fovV2uMFU1TqHRhio2gUp)

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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 $v1_relat_1 : \iota \Rightarrow o$ 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 $np_2 : \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k5_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k8_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_ami_2 : \iota$ 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. Let $v1_setfam_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 \\ & X2)) \Rightarrow ((X0 \in X1) \Rightarrow (k1_funct_1 (k5_relat_1 X2 X1) X0 = k1_funct_1 X2 \\ & X0)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \tag{2}$$

Assume the following.

$$\neg v1_xboole_0 np_2 \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{4}$$

Assume the following.

$$k8_struct_0 k1_scmpds_2 = k2_ami_2 \tag{5}$$

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.

$$(v1_extpro_1 k1_scmpds_2 np_2)\wedge(l1_extpro_1 k1_scmpds_2 np_2) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_setfam_1 X0)\Rightarrow(\forall X1.(l1_memstr_0 X1 X0)\Rightarrow \\ (\forall X2.((v1_relat_1 X2)\wedge((v4_relat_1 X2 (u1_struct_0 X1))\wedge \\ ((v1_funct_1 X2)\wedge(v5_funct_1 X2 (k2_memstr_0 X0 X1))))))\Rightarrow(k6_memstr_0 \\ X0 X1 X2 = k5_relat_1 X2 (k8_struct_0 X1)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1_ami_2 X0)\Leftrightarrow(X0 \in k2_ami_2) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (10)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0)\wedge(v7_ordinal1 X0))\Rightarrow((\neg v1_xboole_0 X0)\wedge((v7_ordinal1 X0)\wedge(\neg v1_setfam_1 X0))) \quad (11)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_ami_2 X0)\wedge(m1_subset_1 X0 (u1_struct_0 k1_scmpds_2)))\Rightarrow \\ (\forall X1.((v1_relat_1 X1)\wedge((v4_relat_1 X1 (u1_struct_0 k1_scmpds_2))\wedge \\ ((v1_funct_1 X1)\wedge((v5_funct_1 X1 (k2_memstr_0 np_2 k1_scmpds_2))\wedge \\ (v1_partfun1 X1 (u1_struct_0 k1_scmpds_2))))))\Rightarrow(\forall X2. \\ ((v1_relat_1 X2)\wedge((v4_relat_1 X2 (u1_struct_0 k1_scmpds_2))\wedge \\ ((v1_funct_1 X2)\wedge((v5_funct_1 X2 (k2_memstr_0 np_2 k1_scmpds_2))\wedge \\ (v1_partfun1 X2 (u1_struct_0 k1_scmpds_2))))))\Rightarrow((k6_memstr_0 \\ np_2 k1_scmpds_2 X1 = k6_memstr_0 np_2 k1_scmpds_2 X2)\Rightarrow(k1_funct_1 \\ X1 X0 = k1_funct_1 X2 X0)))) \end{aligned}$$