

t58_sf_mastr

(TMb8zU4BAYcNbz8HHt8EhMFi5VXC6U6vvgE)

October 27, 2020

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 $k1_scmf_sa_2 : \iota$ be given. Let $m1_scmf_sa_2 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k14_scmf_sa_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15_scmf_sa_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_sf_mastr : \iota \Rightarrow \iota$ be given. Let $k4_sf_mastr : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_sf_mastr : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 \\ X0 (u1_compos_1 k1_scmf_sa_2)) \wedge ((v1_funct_1 X0) \wedge (v1_finset_1 \\ X0)))))) \Rightarrow (\neg k6_sf_mastr X0 \in k4_sf_mastr X0) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 (u1_compos_1 k1_scmf_sa_2)) \Rightarrow (\forall X1. \\ ((v1_relat_1 X1) \wedge ((v4_relat_1 X1 k5_numbers) \wedge ((v5_relat_1 X1 \\ (u1_compos_1 k1_scmf_sa_2)) \wedge ((v1_funct_1 X1) \wedge (v1_finset_1 X1)))))) \Rightarrow \\ ((X0 \in k2_relset_1 (u1_compos_1 k1_scmf_sa_2) X1) \Rightarrow (r1_tarski (\\ k3_sf_mastr X0) (k4_sf_mastr X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_ami_2 X0) \wedge (m1_subset_1 X0 (u1_struct_0 k1_scmf_sa_2))) \Rightarrow \\ (\forall X1.((v1_ami_2 X1) \wedge (m1_subset_1 X1 (u1_struct_0 k1_scmf_sa_2))) \Rightarrow \\ (\forall X2.(m1_scmf_sa_2 X2) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_compos_1 \\ k1_scmf_sa_2)) \Rightarrow (((X3 = k14_scmf_sa_2 X0 X1 X2) \vee (X3 = k15_scmf_sa_2 \\ X0 X1 X2)) \Rightarrow (k3_sf_mastr X3 = k1_tarski X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski (k1_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_ami_2 X0)\wedge(m1_subset_1 \\ & X0 (u1_struct_0 k1_scmf_sa_2)))\wedge(((v1_ami_2 X1)\wedge(m1_subset_1 \\ & X1 (u1_struct_0 k1_scmf_sa_2)))\wedge(m1_scmf_sa_2 X2)))\Rightarrow(m1_subset_1 \\ & (k15_scmf_sa_2 X0 X1 X2) (u1_compos_1 k1_scmf_sa_2)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_ami_2 X0)\wedge(m1_subset_1 \\ & X0 (u1_struct_0 k1_scmf_sa_2)))\wedge(((v1_ami_2 X1)\wedge(m1_subset_1 \\ & X1 (u1_struct_0 k1_scmf_sa_2)))\wedge(m1_scmf_sa_2 X2)))\Rightarrow(m1_subset_1 \\ & (k14_scmf_sa_2 X0 X1 X2) (u1_compos_1 k1_scmf_sa_2)) \end{aligned} \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_ami_2 X0)\wedge(m1_subset_1 X0 (u1_struct_0 k1_scmf_sa_2)))\Rightarrow \\ & (\forall X1.((v1_ami_2 X1)\wedge(m1_subset_1 X1 (u1_struct_0 k1_scmf_sa_2)))\Rightarrow \\ & (\forall X2.(m1_scmf_sa_2 X2)\Rightarrow(\forall X3.((v1_relat_1 X3)\wedge \\ & (v4_relat_1 X3 k5_numbers)\wedge((v5_relat_1 X3 (u1_compos_1 k1_scmf_sa_2))\wedge \\ & ((v1_funct_1 X3)\wedge(v1_finset_1 X3))))))\Rightarrow(\neg((k14_scmf_sa_2 X0 X1 \\ & X2 \in k2_relset_1 (u1_compos_1 k1_scmf_sa_2) X3)\vee(k15_scmf_sa_2 \\ & X0 X1 X2 \in k2_relset_1 (u1_compos_1 k1_scmf_sa_2) X3))\wedge(k6_sf_mastr \\ & X3 = X2)))))) \end{aligned}$$