

t25_scmfsa_1

(TMHRq1mDwYXATtik9khVYd5bAeTDFUzCSs7)

October 27, 2020

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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_scmfsa_1 : \iota$ be given. Let $k2_scmfsa_1 : \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_scmfsa_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_funct_1 : \iota \Rightarrow o$ be given. Let $v2_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_3 : \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. \forall X2. \\ & \forall X3.(X1 \neq X3) \Rightarrow (k1_funct_1 (k1_funct_4 X0 (k16_funcop_1 \\ & X1 X2)) X3 = k1_funct_1 X0 X3)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. v1_relat_1 (k2_zfmisc_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (v4_funct_1 (k4_card_3 X0)) \quad (3)$$

Assume the following.

$$(v1_relat_1 (k3_relat_1 k4_scmfsa_1 k5_scmfsa_1)) \wedge (v2_relat_1 (k3_relat_1 k4_scmfsa_1 k5_scmfsa_1)) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \wedge ((\\ & v1_relat_1 X1) \wedge (v1_funct_1 X1))) \Rightarrow ((v1_relat_1 (k3_relat_1 X0 \\ & X1)) \wedge (v1_funct_1 (k3_relat_1 X0 X1))) \end{aligned} \quad (5)$$

Assume the following.

$$(v1_relat_1\ k5_scmf_sa_1) \wedge ((v4_relat_1\ k5_scmf_sa_1\ np_3) \wedge (v1_funct_1\ k5_scmf_sa_1) \wedge (v1_partfun1\ k5_scmf_sa_1\ np_3)) \quad (6)$$

Assume the following.

$$(v1_funct_1\ k4_scmf_sa_1) \wedge ((v1_funct_2\ k4_scmf_sa_1\ k1_scmf_sa_1\ np_3) \wedge (m1_subset_1\ k4_scmf_sa_1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k1_scmf_sa_1\ np_3)))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k16_funcop_1\ X0\ X1 = k7_funcop_1\ (k1_tarski\ X0)\ X1 \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ (k4_card_3\ (k3_relat_1\ k4_scmf_sa_1\ k5_scmf_sa_1))) \Rightarrow (\forall X1.(m2_subset_1\ X1\ k1_scmf_sa_1\ k2_scmf_sa_1) \Rightarrow (\forall X2.(v1_int_1\ X2) \Rightarrow (k7_scmf_sa_1\ X0\ X1\ X2 = k1_funct_4\ X0\ (k16_funcop_1\ X1\ X2)))) \quad (9)$$

Assume the following.

$$\forall X0.(v4_funct_1\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow (v1_relat_1\ X1) \wedge (v1_funct_1\ X1)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_relat_1\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0)) \Rightarrow (v1_relat_1\ X1)) \quad (11)$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ (k4_card_3\ (k3_relat_1\ k4_scmf_sa_1\ k5_scmf_sa_1))) \Rightarrow (\forall X1.(m2_subset_1\ X1\ k1_scmf_sa_1\ k2_scmf_sa_1) \Rightarrow (\forall X2.(v1_int_1\ X2) \Rightarrow (\forall X3.(m2_subset_1\ X3\ k1_scmf_sa_1\ k2_scmf_sa_1) \Rightarrow ((X3 \neq X1) \Rightarrow (k1_funct_1\ (k7_scmf_sa_1\ X0\ X1\ X2)\ X3 = k1_funct_1\ X0\ X3))))))$$