

t3_scmring1

(TMd9BVAorfzwcwQEnEPkHgLKIEHnRSsqLt7)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_ami_2 : \iota$ be given. Let $k2_ami_2 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_ami_2 : \iota$ be given. Let $k1_scmring1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k6_afinsq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_scm_inst : \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge ((v5_ordinal1 \\ & X2) \wedge ((v1_funct_1 X2) \wedge (v1_finset_1 X2)))) \Rightarrow ((X2 = k6_afinsq_1 \\ X0 X1) \Leftrightarrow ((k1_afinsq_1 X2 = np_2) \wedge ((k1_funct_1 X2 k6_numbers = X0) \wedge \\ & (k1_funct_1 X2 np_1 = X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. \\ & ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((X0 \in k9_xtuple_0 X1) \Rightarrow (k1_funct_1 \\ & (k3_relat_1 X1 X2) X0 = k1_funct_1 X2 (k1_funct_1 X1 X0)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & (((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))))\wedge(m1_subset_1 X3 X0)))\Rightarrow(k3_funct_2 X0 \\ & X1 X2 X3 = k1_funct_1 X2 X3) \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$k9_xtuple_0 k3_ami_2 = k1_ami_2 \quad (6)$$

Assume the following.

$$\neg v1_xboole_0 k1_ami_2 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(v5_ordinal1 (k6_afinsq_1 X0 X1)\wedge(v1_finset_1 (k6_afinsq_1 X0 X1))) \quad (8)$$

Assume the following.

$$\begin{aligned} & (v1_funct_1 k3_ami_2)\wedge((v1_funct_2 k3_ami_2 k1_ami_2 np_2)\wedge \\ & (m1_subset_1 k3_ami_2 (k1_zfmisc_1 (k2_zfmisc_1 k1_ami_2 np_2)))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow((v1_relat_1 \\ & (k1_scmring1 X0))\wedge((v4_relat_1 (k1_scmring1 X0) np_2)\wedge((v1_funct_1 \\ & (k1_scmring1 X0))\wedge(v1_partfun1 (k1_scmring1 X0) np_2)))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0)\wedge((v1_funct_2 X0 k1_ami_2 np_2)\wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k1_ami_2 np_2)))))\Rightarrow \\ & ((X0 = k3_ami_2)\Leftrightarrow(\forall X1.(m1_subset_1 X1 k1_ami_2)\Rightarrow(((X1 = \\ & k5_numbers)\Rightarrow(k3_funct_2 k1_ami_2 np_2 X0 X1 = k6_numbers)\wedge(\\ & (X1 \in k2_ami_2)\Rightarrow(k3_funct_2 k1_ami_2 np_2 X0 X1 = np_1)))))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow(k1_scmring1 X0 = k6_afinsq_1 k5_numbers (u1_struct_0 X0)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow(\forall X1. \\ & (m1_subset_1 X1 k1_ami_2)\Rightarrow((X1 \in k2_ami_2)\Rightarrow(k1_funct_1 (k3_relat_1 \\ & k3_ami_2 (k1_scmring1 X0)) X1 = u1_struct_0 X0))) \end{aligned}$$