

t8_scmring1 (TMFTEQsySWxg- WAUV7mvU3KsWkYkyooBLeh2)

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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 $k4_card_3 : \iota \Rightarrow \iota$ 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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k3_scmring1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_card_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ami_2 : \iota$ 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 $k4_numbers : \iota$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$k5_card_3 \ k5_numbers \ (k4_card_3 \ (k3_relat_1 \ k3_ami_2 \ k4_ami_2)) = k5_numbers \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 \ X0) \wedge (v1_funct_1 \ X0)) \Rightarrow (\forall X1. \forall X2. \\ & \forall X3. (X1 \neq X3) \Rightarrow (k1_funct_1 \ (k1_funct_4 \ X0 \ (k16_funcop_1 \ X1 \ X2)) \ X3 = k1_funct_1 \ X0 \ X3)) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers \neq k4_numbers \quad (3)$$

Assume the following.

$$\forall X0. (m2_subset_1 \ X0 \ k1_ami_2 \ k2_ami_2) \Rightarrow (k5_card_3 \ X0 \ (k4_card_3 \ (k3_relat_1 \ k3_ami_2 \ k4_ami_2)) = k4_numbers) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k7_funcop_1 \ X0 \ X1 = k2_funcop_1 \ X0 \ X1 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.v1_relat_1 (k2_zfmisc_1 X0 X1) \quad (6)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge(v1_funct_1 X0))\Rightarrow(v4_funct_1 (k4_card_3 X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_relat_1 X0)\wedge(v1_funct_1 X0))\wedge((v1_relat_1 X1)\wedge(v1_funct_1 X1)))\Rightarrow((v1_relat_1 (k3_relat_1 X0 X1))\wedge(v1_funct_1 (k3_relat_1 X0 X1))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.v1_relat_1 (k3_relat_1 X0 X1) \quad (9)$$

Assume the following.

$$(v1_funct_1 k3_ami_2)\wedge((v1_funct_2 k3_ami_2 k1_ami_2 np_2)\wedge(m1_subset_1 k3_ami_2 (k1_zfmisc_1 (k2_zfmisc_1 k1_ami_2 np_2)))) \quad (10)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow((v1_relat_1 (k1_scmring1 X0))\wedge((v4_relat_1 (k1_scmring1 X0) np_2)\wedge((v1_funct_1 (k1_scmring1 X0))\wedge(v1_partfun1 (k1_scmring1 X0) np_2)))) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.k16_funcop_1 X0 X1 = k7_funcop_1 (k1_tarski X0) X1 \quad (12)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow(\forall X1.(m1_subset_1 X1 (k4_card_3 (k3_relat_1 k3_ami_2 (k1_scmring1 X0))))\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow(k3_scmring1 X0 X1 X2 = k1_funct_4 X1 (k16_funcop_1 k5_numbers X2)))) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.k2_funcop_1 X0 X1 = k2_zfmisc_1 X0 (k1_tarski X1) \quad (14)$$

Assume the following.

$$\forall X0.(v4_funct_1 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge(v1_funct_1 X1))) \quad (15)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_relat_1 X1)) \quad (16)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k4_card_3 (k3_relat_1 k3_ami_2 (k1_scmring1 \\ & X0)))) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3.(m2_subset_1 \\ & X3 k1_ami_2 k2_ami_2) \Rightarrow (k1_funct_1 (k3_scmring1 X0 X1 X2) X3 = k1_funct_1 \\ & X1 X3)))) \end{aligned}$$