

t6_ami_2 (TMLcFnHtjS- Djf5WhY42cfGWPNFdsmGUrDNc)

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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 $k4_ami_2 : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ 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 $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_ami_2 : \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_numbers : \iota$ be given. Let $k2_ami_2 : \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge ((v5_ordinal1 \\ & X2) \wedge ((v1_funct_1 X2) \wedge (v1_finset_1 X2)))) \Rightarrow ((X2 = k6_afinsq_1 \\ & X0 X1) \Leftrightarrow ((k1_afinsq_1 X2 = np_2) \wedge ((k1_funct_1 X2 k6_numbers = X0) \wedge \\ & (k1_funct_1 X2 np_1 = X1)))) \quad (3) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. \\ & ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((X0 \in k9_xtuple_0 X1) \Rightarrow (k1_funct_1 \\ & (k3_relat_1 X1 X2) X0 = k1_funct_1 X2 (k1_funct_1 X1 X0)))) \quad (4) \end{aligned}$$

Assume the following.

$$\neg v1_xboole_0 \ np_2 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski \ X0 \ X0 \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 \ X0) \wedge \\ & (((v1_funct_1 \ X2) \wedge ((v1_funct_2 \ X2 \ X0 \ X1) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \\ & (k2_zfmisc_1 \ X0 \ X1)))))) \wedge (m1_subset_1 \ X3 \ X0))) \Rightarrow (k3_funct_2 \ X0 \\ & X1 \ X2 \ X3 = k1_funct_1 \ X2 \ X3) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 \ X1) \wedge (v4_relat_1 \ X1 \ X0)) \Rightarrow (k1_relset_1 \ X0 \ X1 = k9_xtuple_0 \ X1) \quad (8)$$

Assume the following.

$$k5_numbers \in k1_ami_2 \quad (9)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_ami_2 \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(v5_ordinal1 \ (k6_afinsq_1 \ X0 \ X1)) \wedge (v1_finset_1 \ (k6_afinsq_1 \ X0 \ X1)) \quad (11)$$

Assume the following.

$$(v1_relat_1 \ k4_ami_2) \wedge ((v4_relat_1 \ k4_ami_2 \ np_2) \wedge ((v1_funct_1 \ k4_ami_2) \wedge (v1_partfun1 \ k4_ami_2 \ np_2))) \quad (12)$$

Assume the following.

$$(v1_funct_1 \ k3_ami_2) \wedge ((v1_funct_2 \ k3_ami_2 \ k1_ami_2 \ np_2) \wedge (m1_subset_1 \ k3_ami_2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k1_ami_2 \ np_2)))) \quad (13)$$

Assume the following.

$$k4_ami_2 = k6_afinsq_1 \ k5_numbers \ k4_numbers \quad (14)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 \ X0) \wedge ((v1_funct_2 \ X0 \ k1_ami_2 \ np_2) \wedge \\ & (m1_subset_1 \ X0 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k1_ami_2 \ np_2)))))) \Rightarrow \\ & ((X0 = k3_ami_2) \Leftrightarrow (\forall X1.(m1_subset_1 \ X1 \ k1_ami_2) \Rightarrow (((X1 = \\ & k5_numbers) \Rightarrow (k3_funct_2 \ k1_ami_2 \ np_2 \ X0 \ X1 = k6_numbers)) \wedge \\ & (X1 \in k2_ami_2) \Rightarrow (k3_funct_2 \ k1_ami_2 \ np_2 \ X0 \ X1 = np_1)))) \end{aligned} \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v4_relat_1 X1 X0))\Rightarrow((v1_partfun1 X1 X0)\Leftrightarrow(k1_relset_1 X0 X1 = X0)) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.(\neg v1_xboole_0 X1)\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v1_funct_2 X2 X0 X1)\Rightarrow(v1_partfun1 X2 X0))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (19)$$

Theorem 1 $k1_funct_1 (k3_relat_1 k3_ami_2 k4_ami_2) k5_numbers = k5_numbers.$