

t16_ami_2

(TMYtuNq32kpTZ3xCZR78u8YdD3J3ozKrVUe)

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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 $k4_ami_2 : \iota$ 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 $v1_int_1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_ami_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ 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 $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_funct_1 : \iota \Rightarrow o$ be given. Let $v2_relat_1 : \iota \Rightarrow o$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (k9_xtuple_0 (k2_funcop_1 X0 X1) = X0) \wedge (r1_tarski (k10_xtuple_0 (k2_funcop_1 X0 X1)) (k1_tarski X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((\neg X0 \in k9_xtuple_0 X1) \Rightarrow (k1_funct_1 (k1_funct_4 X2 X1) X0 = k1_funct_1 X2 X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k7_funcop_1 X0 X1 = k2_funcop_1 X0 X1 \quad (3)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (v4_funct_1 (k4_card_3 X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \wedge ((v1_relat_1 X1) \wedge (v1_funct_1 X1))) \Rightarrow ((v1_relat_1 (k3_relat_1 X0 X1)) \wedge (v1_funct_1 (k3_relat_1 X0 X1))) \quad (5)$$

Assume the following.

$$(v1_relat_1 (k3_relat_1 k3_ami_2 k4_ami_2)) \wedge (v2_relat_1 (k3_relat_1 k3_ami_2 k4_ami_2)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 (k16_funcop_1 X0 X1)) \wedge (v1_funct_1 (k16_funcop_1 X0 X1)) \quad (7)$$

Assume the following.

$$(v1_relat_1 k4_ami_2) \wedge ((v4_relat_1 k4_ami_2 np_2) \wedge ((v1_funct_1 k4_ami_2) \wedge (v1_partfun1 k4_ami_2 np_2))) \quad (8)$$

Assume the following.

$$(v1_funct_1 k3_ami_2) \wedge ((v1_funct_2 k3_ami_2 k1_ami_2 np_2) \wedge (m1_subset_1 k3_ami_2 (k1_zfmisc_1 (k2_zfmisc_1 k1_ami_2 np_2)))) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. k16_funcop_1 X0 X1 = k7_funcop_1 (k1_tarski X0) X1 \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 (k4_card_3 (k3_relat_1 k3_ami_2 k4_ami_2))) \Rightarrow \\ (\forall X1. (m2_subset_1 X1 k1_ami_2 k2_ami_2) \Rightarrow (\forall X2. (v1_int_1 X2) \Rightarrow (k7_ami_2 X0 X1 X2 = k1_funct_4 X0 (k16_funcop_1 X1 X2)))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (12)$$

Assume the following.

$$\forall X0. (v4_funct_1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge (v1_funct_1 X1))) \quad (13)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (14)$$

Theorem 1

$$\begin{aligned} \forall X0. (m1_subset_1 X0 (k4_card_3 (k3_relat_1 k3_ami_2 k4_ami_2))) \Rightarrow \\ (\forall X1. (m2_subset_1 X1 k1_ami_2 k2_ami_2) \Rightarrow (\forall X2. (v1_int_1 X2) \Rightarrow (\forall X3. (m2_subset_1 X3 k1_ami_2 k2_ami_2) \Rightarrow \\ ((X3 \neq X1) \Rightarrow (k1_funct_1 (k7_ami_2 X0 X1 X2) X3 = k1_funct_1 X0 X3)))))) \end{aligned}$$