# t15_ami_2 (TMYZ7jNGB7HBS4sGEN5N6Wg2HghSXMC5xDN)

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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 $v1\_relat\_1 : \iota \Rightarrow o$ 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 $k7\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4\_funct\_1 : \iota \Rightarrow o$ 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. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.\forall X2.\ k1\_funct\_1\ (k1\_funct\_4\ X0\ (k16\_funcop\_1\ X1\ X2))\ X1 = X2) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.k7\_funcop\_1\ X0\ X1 = k2\_funcop\_1\ X0\ X1 \tag{2}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (v4\_funct\_1\ (k4\_card\_3\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \wedge ((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1))) \Rightarrow ((v1\_relat\_1\ (k3\_relat\_1\ X0\ X1)) \wedge (v1\_funct\_1\ (k3\_relat\_1\ X0\ X1))) \tag{4}$$

Assume the following.

$$(v1\_relat\_1\ k4\_ami\_2) \wedge ((v4\_relat\_1\ k4\_ami\_2\ np\_\_2) \wedge ((v1\_funct\_1\ k4\_ami\_2) \wedge (v1\_partfun1\ k4\_ami\_2\ np\_\_2))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.v1\_relat\_1\ (k3\_relat\_1\ X0\ X1) \tag{6}$$

Assume the following.

$$(v1\_funct\_1\ k3\_ami\_2)\wedge((v1\_funct\_2\ k3\_ami\_2\ k1\_ami\_2\ np\_\_2)\wedge (m1\_subset\_1\ k3\_ami\_2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_ami\_2\ np\_\_2)))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.k16\_funcop\_1\ X0\ X1 = k7\_funcop\_1\ (k1\_tarski\ X0)\ X1 \tag{8}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k4\_card\_3\ (k3\_relat\_1\ k3\_ami\_2\ k4\_ami\_2)))\Rightarrow (\forall X1.(m2\_subset\_1\ X1\ k1\_ami\_2\ k2\_ami\_2)\Rightarrow(\forall X2.( v1\_int\_1\ X2)\Rightarrow(k7\_ami\_2\ X0\ X1\ X2 = k1\_funct\_4\ X0\ (k16\_funcop\_1\ X1\ X2)))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.k2\_funcop\_1\ X0\ X1 = k2\_zfmisc\_1\ X0\ (k1\_tarski\ X1) \tag{10}$$

Assume the following.

$$\forall X0.(v4\_funct\_1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow( (v1\_relat\_1\ X1)\wedge(v1\_funct\_1\ X1))) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{12}$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1\ X0\ (k4\_card\_3\ (k3\_relat\_1\ k3\_ami\_2\ k4\_ami\_2)))\Rightarrow (\forall X1.(m2\_subset\_1\ X1\ k1\_ami\_2\ k2\_ami\_2)\Rightarrow(\forall X2.( v1\_int\_1\ X2)\Rightarrow(k1\_funct\_1\ (k7\_ami\_2\ X0\ X1\ X2)\ X1 = X2)))$$