

# t28\_ami\_2 (TMHmPhSjjvo- CYmu9yHkTHJ4XqXJvZi5qPNU)

October 27, 2020

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  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_ami\_2 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v2\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  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  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$k9\_xtuple\_0 (k3\_relat\_1 k3\_ami\_2 k4\_ami\_2) = k1\_ami\_2 \quad (2)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge ((v2\_relat\_1 X0) \wedge (v1\_funct\_1 X0))) \Rightarrow (\neg v1\_xboole\_0 (k4\_card\_3 X0)) \quad (3)$$

Assume the following.

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

Assume the following.

$$(v1\_relat\_1 (k3\_relat\_1 k3\_ami\_2 k4\_ami\_2)) \wedge (v2\_relat\_1 (k3\_relat\_1 k3\_ami\_2 k4\_ami\_2)) \quad (5)$$

Assume the following.

$$(v1\_relat\_1 k4\_ami\_2) \wedge ((v4\_relat\_1 k4\_ami\_2 np\_2) \wedge ((v1\_funct\_1 k4\_ami\_2) \wedge (v1\_partfun1 k4\_ami\_2 np\_2))) \quad (6)$$

Assume the following.

$$(v1\_funct\_1\ k3\_ami\_2) \wedge ((v1\_funct\_2\ k3\_ami\_2\ k1\_ami\_2\ np\_2) \wedge (m1\_subset\_1\ k3\_ami\_2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_ami\_2\ np\_2)))) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1. (X1 = \\ k4\_card\_3\ X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. ((v1\_relat\_1 \\ X3) \wedge (v1\_funct\_1\ X3)) \wedge ((X2 = X3) \wedge ((k9\_xtuple\_0\ X3 = k9\_xtuple\_0 \\ X0) \wedge (\forall X4. (X4 \in k9\_xtuple\_0\ X0) \Rightarrow (k1\_funct\_1\ X3\ X4 \in k1\_funct\_1 \\ X0\ X4))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (v1\_relat\_1\ X2) \quad (9)$$

**Theorem 1**

$$\forall X0. (m1\_subset\_1\ X0\ (k4\_card\_3\ (k3\_relat\_1\ k3\_ami\_2\ k4\_ami\_2))) \Rightarrow (k9\_xtuple\_0\ X0 = k1\_ami\_2)$$