

t9\_ami\_2  
(TMV6PkBCzPzfkN4N5h712e2P2YorL6pYQnb)

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Let  $k5\_card\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  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  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k1\_ami\_2 : \iota$  be given. Let  $v2\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  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.

$$k1\_funct\_1 (k3\_relat\_1 k3\_ami\_2 k4\_ami\_2) k5\_numbers = k5\_numbers \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow ((X0 \in k9\_xtuple\_0 X1) \Rightarrow ((k4\_card\_3 X1 = k1\_xboole\_0) \vee (k5\_card\_3 X0 (k4\_card\_3 X1) = k1\_funct\_1 X1 X0))) \quad (2)$$

Assume the following.

$$k5\_numbers \in k1\_ami\_2 \quad (3)$$

Assume the following.

$$k9\_xtuple\_0 (k3\_relat\_1 k3\_ami\_2 k4\_ami\_2) = k1\_ami\_2 \quad (4)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge ((v2\_relat\_1 X0) \wedge (v1\_funct\_1 X0))) \Rightarrow (\neg v1\_xboole\_0 (k4\_card\_3 X0)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \wedge ((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1))) \Rightarrow ((v1\_relat\_1 (k3\_relat\_1 X0 X1)) \wedge (v1\_funct\_1 (k3\_relat\_1 X0 X1))) \quad (6)$$

Assume the following.

$$(v1\_relat\_1 (k3\_relat\_1 k3\_ami\_2 k4\_ami\_2)) \wedge (v2\_relat\_1 (k3\_relat\_1 k3\_ami\_2 k4\_ami\_2)) \quad (7)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (8)$$

Assume the following.

$$(v1\_relat\_1 k4\_ami\_2) \wedge ((v4\_relat\_1 k4\_ami\_2 np\_2) \wedge ((v1\_funct\_1 k4\_ami\_2) \wedge (v1\_partfun1 k4\_ami\_2 np\_2))) \quad (9)$$

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.

$$\forall X0. \forall X1. \forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow (v1\_relat\_1 X2) \quad (11)$$

**Theorem 1**

$$k5\_card\_3 k5\_numbers (k4\_card\_3 (k3\_relat\_1 k3\_ami\_2 k4\_ami\_2)) = k5\_numbers$$