

## l16\_ami\_2

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Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k3\_ami\_2 : \iota$  be given. Let  $k1\_ami\_2 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $np\_2 : \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  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  $v1\_funct\_1 : \iota \Rightarrow o$  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. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\neg v1\_xboole\_0 \ np\_2 \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1 \ X1) \wedge (v4\_relat\_1 \ X1 \ X0)) \Rightarrow (k1\_relset\_1 \ X0 \ X1 = k9\_xtuple\_0 \ X1) \tag{2}$$

Assume the following.

$$(v1\_funct\_1 \ k3\_ami\_2) \wedge ((v1\_funct\_2 \ k3\_ami\_2 \ k1\_ami\_2 \ np\_2) \wedge (m1\_subset\_1 \ k3\_ami\_2 \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ k1\_ami\_2 \ np\_2)))) \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1 \ X1) \wedge (v4\_relat\_1 \ X1 \ X0)) \Rightarrow (v1\_partfun1 \ X1 \ X0) \Leftrightarrow (k1\_relset\_1 \ X0 \ X1 = X0) \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. (\neg v1\_xboole\_0 \ X1) \Rightarrow (\forall X2. (m1\_subset\_1 \ X2 \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ X0 \ X1))) \Rightarrow ((v1\_funct\_2 \ X2 \ X0 \ X1) \Rightarrow (v1\_partfun1 \ X2 \ X0))) \tag{5}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1\_subset\_1 \ X2 \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ X0 \ X1))) \Rightarrow ((v4\_relat\_1 \ X2 \ X0) \wedge (v5\_relat\_1 \ X2 \ X1)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_relat\_1 X2) \quad (7)$$

**Theorem 1**  $k9\_xtuple\_0 k3\_ami\_2 = k1\_ami\_2$ .