

# t1\_fuzzy\_1

(TMN4zityP7L5zNQGzBNJcDmhd37dX8NGWdd)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_rfunct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $np\_1 : \iota$  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  $k1\_numbers : \iota$  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  $k4\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. k7\_rfunct\_1 X0 X1 = k4\_funct\_3 X0 X1 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_funct\_1 (k4\_funct\_3 X0 X1)) \wedge (v1\_partfun1 (k4\_funct\_3 X0 X1) X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 (k4\_funct\_3 X0 X1)) \wedge ((v5\_relat\_1 (k4\_funct\_3 X0 X1) (k1\_rcomp\_1 k6\_numbers np\_1)) \wedge (v1\_funct\_1 (k4\_funct\_3 X0 X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_funct\_1 (k7\_rfunct\_1 X0 X1)) \wedge (m1\_subset\_1 (k7\_rfunct\_1 X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k1\_numbers))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow ((v1\_partfun1 X2 X0) \Rightarrow (v1\_funct\_2 X2 X0 X1)) \quad (5)$$

## Theorem 1

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow ((v5\_relat\_1 (k7\_rfunct\_1 X0 X0) (k1\_rcomp\_1 k6\_numbers np\_1)) \wedge ((v1\_funct\_1 (k7\_rfunct\_1 X0 X0)) \wedge ((v1\_funct\_2 (k7\_rfunct\_1 X0 X0) X0 k1\_numbers) \wedge (m1\_subset\_1 (k7\_rfunct\_1 X0 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k1\_numbers))))))$$