

# l29\_limfunc1 (TMMkck- ZDy48S9Y1L91SgE7KRyhSVtdmxBkk)

October 27, 2020

Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k1\_recdef\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v4\_valued\_0 : \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  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.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (k1\_funct\_1 (k4\_relat\_1 X1) X0 = X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (k6\_funct\_3 X0 X1 = k4\_relat\_1 X1) \quad (4)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v4\_valued\_0 X0))) \Rightarrow (k1\_recdef\_1 X0 X1 = k1\_funct\_1 X0 X1) \quad (6)$$

Assume the following.

$$(\neg v1\_xboole\_0 \ k4\_ordinal1) \wedge (v3\_ordinal1 \ k4\_ordinal1) \quad (7)$$

Assume the following.

$$v6\_membered \ k4\_ordinal1 \quad (8)$$

Assume the following.

$$\forall X0.(v6\_membered \ X0) \Rightarrow ((v1\_relat\_1 \ (k4\_relat\_1 \ X0)) \wedge (v4\_valued\_0 \ (k4\_relat\_1 \ X0))) \quad (9)$$

Assume the following.

$$\neg v1\_xboole\_0 \ k1\_numbers \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 \ X1 \ (k1\_zfmisc\_1 \ X0)) \Rightarrow ((v1\_funct\_1 \ (k6\_funct\_3 \ X0 \ X1)) \wedge ((v1\_funct\_2 \ (k6\_funct\_3 \ X0 \ X1) \ X1 \ X0) \wedge (m1\_subset\_1 \ (k6\_funct\_3 \ X0 \ X1) \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ X1 \ X0))))) \quad (11)$$

Assume the following.

$$m1\_subset\_1 \ k5\_numbers \ (k1\_zfmisc\_1 \ k1\_numbers) \quad (12)$$

**Theorem 1**

$$\forall X0.(m2\_subset\_1 \ X0 \ k1\_numbers \ k5\_numbers) \Rightarrow (k1\_reodef\_1 \ (k6\_funct\_3 \ k1\_numbers \ k5\_numbers) \ X0 = X0)$$