

## t18\_limfunc1

(TMRqzH383rUZ9V5YxgnBWw8D1ijrYZkNfJA)

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Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  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  $v1\_limfunc1 : \iota \Rightarrow o$  be given. Let  $v2\_comseq\_2 : \iota \Rightarrow o$  be given. Let  $k3\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_seq\_2 : \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $v1\_comseq\_2 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v3\_valued\_0 : \iota \Rightarrow o$  be given. Let  $v1\_seq\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k1\_numbers) \wedge \\
 & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k1\_numbers)))))) \Rightarrow \\
 & (\forall X1. ((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 k5\_numbers k1\_numbers) \wedge \\
 & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k1\_numbers)))))) \Rightarrow \\
 & (((v1\_limfunc1 X0) \wedge (v2\_seq\_2 X1)) \Rightarrow (v1\_limfunc1 (k3\_valued\_1 \\
 & k5\_numbers k1\_numbers k1\_numbers X0 X1))))
 \end{aligned} \tag{1}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{2}$$

Assume the following.

$$v3\_membered k1\_numbers \tag{3}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers \\
 & k1\_numbers))) \Rightarrow (((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers \\
 & k1\_numbers) \wedge (v2\_comseq\_2 X0))) \Rightarrow ((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 \\
 & X0 k5\_numbers k1\_numbers) \wedge (v1\_comseq\_2 X0))))
 \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge ((v3\_valued\_0 \\
 & X0) \wedge (v1\_comseq\_2 X0)))) \Rightarrow ((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge \\
 & ((v3\_valued\_0 X0) \wedge ((v1\_seq\_2 X0) \wedge (v2\_seq\_2 X0))))
 \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_relat\_1 X2) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(v3\_membered X1)\Rightarrow(\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v3\_valued\_0 X2)) \quad (7)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0)\wedge((v1\_funct\_2 X0 k5\_numbers k1\_numbers)\wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k1\_numbers))))))\Rightarrow \\ & (\forall X1.((v1\_funct\_1 X1)\wedge((v1\_funct\_2 X1 k5\_numbers k1\_numbers)\wedge \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k1\_numbers))))))\Rightarrow \\ & (((v1\_limfunc1 X0)\wedge(v2\_comseq\_2 X1))\Rightarrow(v1\_limfunc1 (k3\_valued\_1 \\ & k5\_numbers k1\_numbers k1\_numbers X0 X1)))) \end{aligned}$$