

## t74\_setlim\_1

(TMHPbnPZ7BBevZqtjtJmqS5WgveLCHJzf6G)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v4\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $k5\_numbers : \iota$  be given. Let  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_kurato\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 k5\_numbers \\
 & (k9\_setfam\_1 X0)) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
 & k5\_numbers (k9\_setfam\_1 X0)))))) \Rightarrow (\forall X2. ((v1\_funct\_1 X2) \wedge \\
 & ((v1\_funct\_2 X2 k5\_numbers (k9\_setfam\_1 X0)) \wedge (m1\_subset\_1 X2 \\
 & (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (k9\_setfam\_1 X0)))))) \Rightarrow \\
 & (\forall X3. ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 k5\_numbers (k9\_setfam\_1 \\
 & X0)) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (k9\_setfam\_1 \\
 & X0)))))) \Rightarrow ((\forall X4. (m1\_subset\_1 X4 k5\_numbers) \Rightarrow (k3\_funct\_2 \\
 & k5\_numbers (k9\_setfam\_1 X0) X3 X4 = k9\_subset\_1 X0 (k3\_funct\_2 k5\_numbers \\
 & (k9\_setfam\_1 X0) X1 X4) (k3\_funct\_2 k5\_numbers (k9\_setfam\_1 X0) \\
 & X2 X4))) \Rightarrow (k3\_kurato\_0 X0 X3 = k9\_subset\_1 X0 (k3\_kurato\_0 X0 X1) \\
 & (k3\_kurato\_0 X0 X2))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 X0)) \Rightarrow (k9\_subset\_1 X0 X1 X2 = k3\_xboole\_0 X1 X2) \tag{2}$$

Assume the following.

$$\forall X0. k9\_setfam\_1 X0 = k1\_zfmisc\_1 X0 \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0 \\ & X1)\wedge((v1\_prob\_1 X1 X0)\wedge((v4\_prob\_1 X1 X0)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k1\_zfmisc\_1 X0))))))\wedge((m1\_subset\_1 X2 X1)\wedge(m1\_subset\_1 X3 X1)))\Rightarrow \\ & (k5\_prob\_1 X0 X1 X2 X3 = k3\_xboole\_0 X2 X3) \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$(\neg v1\_xboole\_0 k4\_ordinal1)\wedge(v3\_ordinal1 k4\_ordinal1) \quad (6)$$

Assume the following.

$$\forall X0.v4\_prob\_1 (k1\_zfmisc\_1 X0) X0 \quad (7)$$

Assume the following.

$$\forall X0.v1\_prob\_1 (k1\_zfmisc\_1 X0) X0 \quad (8)$$

Assume the following.

$$\forall X0.\neg v1\_xboole\_0 (k1\_zfmisc\_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.m1\_subset\_1 (k9\_setfam\_1 X0) (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0)) \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0 X0)\wedge \\ & (((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X0 X1)\wedge(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1))))))\wedge(m1\_subset\_1 X3 X0)))\Rightarrow(m1\_subset\_1 ( \\ & k3\_funct\_2 X0 X1 X2 X3) X1) \end{aligned} \quad (11)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X1) \wedge ((v1\_prob\_1 X1 X0) \wedge \\ & ((v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0)))))) \Rightarrow (\forall X2. ((v5\_relat\_1 X2 X1) \wedge ((v1\_funct\_1 X2) \wedge ( \\ & (v1\_funct\_2 X2 k5\_numbers (k9\_setfam\_1 X0)) \wedge (m1\_subset\_1 X2 ( \\ & k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (k9\_setfam\_1 X0)))))) \Rightarrow \\ & (\forall X3. ((v5\_relat\_1 X3 X1) \wedge ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 \\ & X3 k5\_numbers (k9\_setfam\_1 X0)) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k5\_numbers (k9\_setfam\_1 X0)))))) \Rightarrow (\forall X4. \\ & ((v5\_relat\_1 X4 X1) \wedge ((v1\_funct\_1 X4) \wedge ((v1\_funct\_2 X4 k5\_numbers \\ & (k9\_setfam\_1 X0)) \wedge (m1\_subset\_1 X4 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k5\_numbers (k9\_setfam\_1 X0)))))) \Rightarrow ((\forall X5. (m1\_subset\_1 \\ & X5 k5\_numbers) \Rightarrow (k3\_funct\_2 k5\_numbers (k9\_setfam\_1 X0) X2 X5 = \\ & k5\_prob\_1 X0 (k9\_setfam\_1 X0) (k3\_funct\_2 k5\_numbers (k9\_setfam\_1 \\ & X0) X3 X5) (k3\_funct\_2 k5\_numbers (k9\_setfam\_1 X0) X4 X5))) \Rightarrow (k3\_kurato\_0 \\ & X0 X2 = k9\_subset\_1 X0 (k3\_kurato\_0 X0 X3) (k3\_kurato\_0 X0 X4)))))) \end{aligned}$$