

t91_setlim_2 (TMMcRRZN- wXJr2xHWGbqMaAqMmmnfGYcRGS4)

October 27, 2020

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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_kurato_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_setlim_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_kurato_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_kurato_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ & (k9_setfam_1 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (k9_setfam_1 X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge \\ & ((v1_funct_2 X2 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 X2 \\ & (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))) \Rightarrow \\ & (((v3_kurato_0 X1 X0) \wedge (v3_kurato_0 X2 X0)) \Rightarrow (k4_kurato_0 X0 (k4_setlim_2 \\ & X0 X1 X2) = k5_subset_1 X0 (k4_kurato_0 X0 X1) (k4_kurato_0 X0 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ & (k9_setfam_1 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (k9_setfam_1 X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge \\ & ((v1_funct_2 X2 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 X2 \\ & (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))) \Rightarrow \\ & (((v3_kurato_0 X1 X0) \wedge (v3_kurato_0 X2 X0)) \Rightarrow (k3_kurato_0 X0 (k4_setlim_2 \\ & X0 X1 X2) = k5_subset_1 X0 (k3_kurato_0 X0 X1) (k3_kurato_0 X0 X2)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.(((v1_funct_1 X1)\wedge((v1_funct_2 \\
& X1 k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\
& (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0))))))\wedge((v1_funct_1 \\
& X2)\wedge((v1_funct_2 X2 k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 \\
& X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0))))))\Rightarrow \\
& ((v1_funct_1 (k4_setlim_2 X0 X1 X2))\wedge((v1_funct_2 (k4_setlim_2 \\
& X0 X1 X2) k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 (k4_setlim_2 \\
& X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers \\
& (k9_setfam_1 X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers (k9_setfam_1 X0))))))\Rightarrow((v3_kurato_0 X1 X0)\Leftrightarrow(k4_kurato_0 \\
& X0 X1 = k3_kurato_0 X0 X1))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers \\
& (k9_setfam_1 X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers (k9_setfam_1 X0))))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge \\
& ((v1_funct_2 X2 k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 X2 \\
& (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0))))))\Rightarrow \\
& (((v3_kurato_0 X1 X0)\wedge(v3_kurato_0 X2 X0))\Rightarrow((v3_kurato_0 (k4_setlim_2 \\
& X0 X1 X2) X0)\wedge(k4_kurato_0 X0 (k4_setlim_2 X0 X1 X2) = k5_subset_1 \\
& X0 (k4_kurato_0 X0 X1) (k4_kurato_0 X0 X2))))))
\end{aligned}$$