

t75_setlim_1 (TMKLDNDh-
pQxe8Nn5NFDsjUBZh1zFBtouiB)

October 27, 2020

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 $k6_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_kurato_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\
& (k9_setfam_1 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers (k9_setfam_1 X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge \\
& ((v1_funct_2 X2 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 X2 \\
& (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))) \Rightarrow \\
& (\forall X3. ((v1_funct_1 X3) \wedge ((v1_funct_2 X3 k5_numbers (k9_setfam_1 \\
& X0)) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 \\
& X0)))))) \Rightarrow ((\forall X4. (m1_subset_1 X4 k5_numbers) \Rightarrow (k3_funct_2 \\
& k5_numbers (k9_setfam_1 X0) X3 X4 = k4_subset_1 X0 (k3_funct_2 k5_numbers \\
& (k9_setfam_1 X0) X1 X4) (k3_funct_2 k5_numbers (k9_setfam_1 X0) \\
& X2 X4))) \Rightarrow (k4_kurato_0 X0 X3 = k4_subset_1 X0 (k4_kurato_0 X0 X1) \\
& (k4_kurato_0 X0 X2))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. \forall X3. (((\neg v1_xboole_0 \\
& X1) \wedge ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0)))))) \wedge ((m1_subset_1 X2 X1) \wedge (m1_subset_1 X3 X1))) \Rightarrow \\
& (k6_prob_1 X0 X1 X2 X3 = k2_xboole_0 X2 X3)
\end{aligned} \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \Rightarrow (k4_subset_1 X0 X1 X2 = k2_xboole_0 X1 X2) \quad (5)$$

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.

$$\forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0) \wedge (((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \wedge (m1_subset_1 X3 X0))) \Rightarrow (m1_subset_1 (k3_funct_2 X0 X1 X2 X3) X1) \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge \\ & ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X2. ((v5_relat_1 X2 X1) \wedge ((v1_funct_1 X2) \wedge \\ & (v1_funct_2 X2 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 X2 (\\ & k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))) \Rightarrow \\ & (\forall X3. ((v5_relat_1 X3 X1) \wedge ((v1_funct_1 X3) \wedge ((v1_funct_2 \\ & X3 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))) \Rightarrow (\forall X4. \\ & ((v5_relat_1 X4 X1) \wedge ((v1_funct_1 X4) \wedge ((v1_funct_2 X4 k5_numbers \\ & (k9_setfam_1 X0)) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (k9_setfam_1 X0)))))) \Rightarrow ((\forall X5. (m1_subset_1 \\ & X5 k5_numbers) \Rightarrow (k3_funct_2 k5_numbers (k9_setfam_1 X0) X2 X5 = \\ & k6_prob_1 X0 (k9_setfam_1 X0) (k3_funct_2 k5_numbers (k9_setfam_1 \\ & X0) X3 X5) (k3_funct_2 k5_numbers (k9_setfam_1 X0) X4 X5))) \Rightarrow (k4_kurato_0 \\ & X0 X2 = k4_subset_1 X0 (k4_kurato_0 X0 X3) (k4_kurato_0 X0 X4)))))) \end{aligned}$$