

t67_setlim_1

(TMMn8eS4QR8rMrtJtJEPPeoTqCLMysx4mhK)

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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 $k3_kurato_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ & (k9_setfam_1 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (k9_setfam_1 X0)))))) \Rightarrow (\forall X2. (X2 \in k3_kurato_0 \\ & X0 X1) \Leftrightarrow (\exists X3. (m1_subset_1 X3 k5_numbers) \wedge (\forall X4. (\\ & m1_subset_1 X4 k5_numbers) \Rightarrow (X2 \in k3_funct_2 k5_numbers (k9_setfam_1 \\ & X0) X1 (k2_nat_1 X3 X4)))))) \end{aligned} \tag{1}$$

Assume the following.

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

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X2) \wedge ((v1_prob_1 \\ & X2 X0) \wedge ((v4_prob_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X3. ((v5_relat_1 X3 X2) \wedge ((v1_funct_1 X3) \wedge (\\ & (v1_funct_2 X3 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 X3 (\\ & k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))) \Rightarrow \\ & ((X1 \in k3_kurato_0 X0 X3) \Leftrightarrow (\exists X4. (m1_subset_1 X4 k5_numbers) \wedge \\ & (\forall X5. (m1_subset_1 X5 k5_numbers) \Rightarrow (X1 \in k3_funct_2 k5_numbers \\ & (k9_setfam_1 X0) X3 (k2_nat_1 X4 X5)))))) \end{aligned}$$