

t12_bor_cant (TMRN-
QUtxXf3a7ihJQFTaTTYEDUstoZmoiKZ)

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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 $r2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_setlim_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_bor_cant : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_setlim_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_bor_cant : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_setlim_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_setlim_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_setlim_1 : \iota \Rightarrow \iota$ be given. Let $k1_setlim_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ & (k9_setfam_1 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (k9_setfam_1 X0)))))) \Rightarrow ((r2_funct_2 k5_numbers (k9_setfam_1 \\ & X0) (k4_setlim_1 X0 X1) (k7_bor_cant X0 X1)) \wedge (r2_funct_2 k5_numbers \\ & (k9_setfam_1 X0) (k2_setlim_1 X0 X1) (k9_bor_cant X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 \\ & X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \wedge ((v5_relat_1 X2 X1) \wedge ((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))))) \Rightarrow (k6_setlim_1 \\ & X0 X1 X2 = k3_setlim_1 X2) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v1_xboole_0 X1)\wedge((v1_prob_1 \\ & X1 X0)\wedge((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0))))))\wedge((v5_relat_1 X2 X1)\wedge((v1_funct_1 X2)\wedge((v1_funct_2 \\ & X2 k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))))\Rightarrow(k5_setlim_1 \\ & X0 X1 X2 = k1_setlim_1 X2) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers \\ & (k9_setfam_1 X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (k9_setfam_1 X0))))))\Rightarrow(k4_setlim_1 X0 X1 = k3_setlim_1 \\ & X1) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers \\ & (k9_setfam_1 X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (k9_setfam_1 X0))))))\Rightarrow(k2_setlim_1 X0 X1 = k1_setlim_1 \\ & X1) \end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge \\ & ((v1_prob_1 X1 X0)\wedge((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0))))))\Rightarrow(\forall X2.((v5_relat_1 X2 X1)\wedge((v1_funct_1 \\ & X2)\wedge((v1_funct_2 X2 k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))))\Rightarrow \\ & ((r2_funct_2 k5_numbers (k9_setfam_1 X0) (k6_setlim_1 X0 X1 X2) \\ & (k7_bor_cant X0 X2))\wedge(r2_funct_2 k5_numbers (k9_setfam_1 X0) \\ & (k5_setlim_1 X0 X1 X2) (k9_bor_cant X0 X2)))) \end{aligned}$$