

t32_pnproc_1

(TMMtR7GL1UyoTDJAK5eV7XMgKFe18GXHYhi)

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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_pnproc_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_pnproc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_pnproc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow \\ & (((X1 = k1_xboole_0) \Rightarrow (X0 = k1_xboole_0)) \Rightarrow (X2 \in k1_funct_2 X0 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. \\ & ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((X0 \in k9_xtuple_0 X1) \Rightarrow (k1_funct_1 \\ & (k3_relat_1 X1 X2) X0 = k1_funct_1 X2 (k1_funct_1 X1 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (\neg v1_xboole_0 X1) \Rightarrow (k9_funct_2 X0 X1 = k1_funct_2 X0 X1) \quad (3)$$

Assume the following.

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

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (5)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_pnproc_1 X1 X0)\Rightarrow((v1_relat_1 (k7_pnproc_1 X0 X1))\wedge(v1_funct_1 (k7_pnproc_1 X0 X1))) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_funct_1 X1)\wedge((v1_funct_2 \\ & X1 X0 k5_numbers)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k5_numbers))))))\wedge(m1_pnproc_1 X2 X0))\Rightarrow((v1_funct_1 (k6_pnproc_1 \\ & X0 X1 X2))\wedge((v1_funct_2 (k6_pnproc_1 X0 X1 X2) X0 k5_numbers)\wedge(\\ & m1_subset_1 (k6_pnproc_1 X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k5_numbers)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_pnproc_1 X1 X0)\Rightarrow(\forall X2.((v1_relat_1 \\ & X2)\wedge(v1_funct_1 X2))\Rightarrow((X2 = k7_pnproc_1 X0 X1)\Leftrightarrow((k9_xtuple_0 \\ & X2 = k9_funct_2 X0 k5_numbers)\wedge(\forall X3.((v1_funct_1 X3)\wedge(\\ & (v1_funct_2 X3 X0 k5_numbers)\wedge(m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 k5_numbers))))))\Rightarrow(k1_funct_1 X2 X3 = k6_pnproc_1 X0 X3 X1)))) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 X0 k5_numbers)\wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers))))))\Rightarrow \\ & (\forall X2.(m1_pnproc_1 X2 X0)\Rightarrow(\forall X3.(m1_pnproc_1 X3 X0)\Rightarrow \\ & (k6_pnproc_1 X0 (k6_pnproc_1 X0 X1 X3) X2 = k1_funct_1 (k3_relat_1 \\ & (k7_pnproc_1 X0 X3) (k7_pnproc_1 X0 X2)) X1))) \end{aligned}$$