

t24_pnproc_1
(TMPXsorFzCP126RoVAqGv5JTPxEGq674Fi4)

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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 $r2_pnproc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_pnproc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_pnproc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_pnproc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 k5_numbers) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 k5_numbers) \wedge \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (\forall X3. ((v1_funct_1 X3) \wedge ((v1_funct_2 X3 X0 k5_numbers) \wedge \\
& (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (((r2_pnproc_1 X0 X1 X2) \wedge (r2_pnproc_1 X0 X2 X3)) \Rightarrow (r2_pnproc_1 \\
& X0 (k3_pnproc_1 X0 X2 X1) (k3_pnproc_1 X0 X3 X1))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 k5_numbers) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 k5_numbers) \wedge \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (r1_pnproc_1 X0 (k3_pnproc_1 X0 (k2_pnproc_1 X0 X1 X2) X2) X1))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 k5_numbers) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 k5_numbers) \wedge \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (r2_pnproc_1 X0 X1 (k2_pnproc_1 X0 X1 X2)))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_funct_1 X1)\wedge((v1_funct_2 \\ & X1 X0 k5_numbers)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k5_numbers))))))\wedge((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 k5_numbers)\wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers))))))\Rightarrow \\ & ((r1_pnproc_1 X0 X1 X2)\Leftrightarrow(X1 = X2)) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_funct_1 X1)\wedge((v1_funct_2 \\ & X1 X0 k5_numbers)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k5_numbers))))))\wedge((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 k5_numbers)\wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers))))))\Rightarrow \\ & ((v1_funct_1 (k3_pnproc_1 X0 X1 X2))\wedge((v1_funct_2 (k3_pnproc_1 \\ & X0 X1 X2) X0 k5_numbers)\wedge(m1_subset_1 (k3_pnproc_1 X0 X1 X2) (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 k5_numbers)))))) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_funct_1 X1)\wedge((v1_funct_2 \\ & X1 X0 k5_numbers)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k5_numbers))))))\wedge((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 k5_numbers)\wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers))))))\Rightarrow \\ & ((v1_funct_1 (k2_pnproc_1 X0 X1 X2))\wedge((v1_funct_2 (k2_pnproc_1 \\ & X0 X1 X2) X0 k5_numbers)\wedge(m1_subset_1 (k2_pnproc_1 X0 X1 X2) (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 k5_numbers)))))) \end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 X0 k5_numbers)\wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers))))))\Rightarrow \\ & (\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 k5_numbers)\wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers))))))\Rightarrow \\ & ((r2_pnproc_1 X0 X1 X2)\Rightarrow(r2_pnproc_1 X0 (k3_pnproc_1 X0 X2 X1) X2)) \end{aligned}$$