t25_pnproc_1 (TMdmAxa5Xz9qCZxky2ZUXN6yRGeZU3R3yv4)

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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. Assume the following.

$$\begin{gathered}\forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (\forall X3.((v1\_funct\_1\ X3) \wedge ((v1\_funct\_2\ X3\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (((r2\_pnproc\_1\ X0\ X1\ X2) \wedge (r2\_pnproc\_1\ X0\ X2\ X3)) \Rightarrow (r2\_pnproc\_1 \\ X0\ (k3\_pnproc\_1\ X0\ X2\ X1)\ (k3\_pnproc\_1\ X0\ X3\ X1)))))\end{gathered} \tag{1}$$

Assume the following.

$$\begin{gathered}\forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (\forall X3.((v1\_funct\_1\ X3) \wedge ((v1\_funct\_2\ X3\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (((r2\_pnproc\_1\ X0\ X1\ X2) \wedge (r2\_pnproc\_1\ X0\ X2\ X3)) \Rightarrow (r2\_pnproc\_1 \\ X0\ (k3\_pnproc\_1\ X0\ X3\ X2)\ (k3\_pnproc\_1\ X0\ X3\ X1)))))\end{gathered} \tag{2}$$

Assume the following.

$$\begin{gathered}\forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (\forall X3.((v1\_funct\_1\ X3) \wedge ((v1\_funct\_2\ X3\ X0\ k5\_numbers) \wedge \\ (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))) \Rightarrow \\ (((r2\_pnproc\_1\ X0\ X1\ X2) \wedge (r2\_pnproc\_1\ X0\ X2\ X3)) \Rightarrow (r2\_pnproc\_1 \\ X0\ X1\ X3))))\end{gathered} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ X0\ k5\_numbers)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers)))))\wedge((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ k5\_numbers)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers))))))\Rightarrow((v1\_funct\_1\ (k3\_pnproc\_1\ X0\ X1\ X2))\wedge((v1\_funct\_2\ (k3\_pnproc\_1\ X0\ X1\ X2)\ X0\ k5\_numbers)\wedge(m1\_subset\_1\ (k3\_pnproc\_1\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers)))))) \tag{4}$$

Theorem 1

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ X0\ k5\_numbers)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers)))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ k5\_numbers)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers)))))\Rightarrow(\forall X3.((v1\_funct\_1\ X3)\wedge((v1\_funct\_2\ X3\ X0\ k5\_numbers)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers)))))\Rightarrow(\forall X4.((v1\_funct\_1\ X4)\wedge((v1\_funct\_2\ X4\ X0\ k5\_numbers)\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k5\_numbers)))))\Rightarrow(((r2\_pnproc\_1\ X0\ X1\ X2)\wedge((r2\_pnproc\_1\ X0\ X3\ X4)\wedge(r2\_pnproc\_1\ X0\ X4\ X1)))\Rightarrow(r2\_pnproc\_1\ X0\ (k3\_pnproc\_1\ X0\ X1\ X4)\ (k3\_pnproc\_1\ X0\ X2\ X3))))))$$