

t58_pnproc_1
(TMR Sqcooc3n4Cz3UjT5k67ZQ8sSEgrtmo6f)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k15_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k12_pnproc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v2_finseq_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k5_numbers) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge \\ (v1_finseq_1 X2)))) \Rightarrow ((X0 \in k4_finseq_1 X2) \Rightarrow (k1_funct_1 (k15_finseq_1 \\ (k12_pnproc_1 X2 X1)) X0 = k1_funct_1 X2 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((v1_relat_1 \\ X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \Rightarrow (k4_finseq_1 X1 = k4_finseq_1 \\ (k15_finseq_1 (k12_pnproc_1 X1 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((\\ v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (((k9_xtuple_0 X0 = k9_xtuple_0 \\ X1) \wedge (\forall X2.(X2 \in k9_xtuple_0 X0) \Rightarrow (k1_funct_1 X0 X2 = k1_funct_1 \\ X1 X2))) \Rightarrow (X0 = X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (k4_finseq_1 X0 = k9_xtuple_0 X0) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_finseq_1 X0))) \Rightarrow \\ ((v1_relat_1 (k15_finseq_1 X0)) \wedge ((v1_funct_1 (k15_finseq_1 \\ X0)) \wedge (v1_finseq_1 (k15_finseq_1 X0)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ (m1_subset_1 (k4_finseq_1 X0) (k1_zfmisc_1 k5_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_finseq_1 X0))) \Rightarrow \\ ((v1_relat_1 (k15_finseq_1 X0)) \wedge (v1_funct_1 (k15_finseq_1 X0))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1.(((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_finseq_1 \\ X0))) \wedge (m1_subset_1 X1 k5_numbers)) \Rightarrow ((v1_relat_1 (k12_pnproc_1 \\ X0 X1)) \wedge ((v1_funct_1 (k12_pnproc_1 X0 X1)) \wedge (v2_finseq_1 (k12_pnproc_1 \\ X0 X1)))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_finseq_1 X0))) \end{aligned} \quad (10)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((v1_relat_1 \\ X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \Rightarrow (k15_finseq_1 (k12_pnproc_1 \\ X1 X0) = X1)) \end{aligned}$$