

l91_pnproc_1 (TMNd-
pLyoR34wQHEXQsjyKDNVUMFPAKHqfsg)

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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 $v2_finseq_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k12_pnproc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((\\ & v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((r1_tarski X0 X1) \Leftrightarrow ((r1_tarski \\ & (k9_xtuple_0 X0) (k9_xtuple_0 X1)) \wedge (\forall X2.(X2 \in k9_xtuple_0 \\ & X0) \Rightarrow (k1_funct_1 X0 X2 = k1_funct_1 X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_finseq_1 \\ & X0))) \wedge (m1_subset_1 X1 k5_numbers)) \Rightarrow ((v1_relat_1 (k12_pnproc_1 \\ & X0 X1)) \wedge ((v1_funct_1 (k12_pnproc_1 X0 X1)) \wedge (v2_finseq_1 (k12_pnproc_1 \\ & X0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow \\ & (X2 \in X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_finseq_1 X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 k5_numbers) \Rightarrow (\forall X2.((v1_relat_1 \\ & X2) \wedge ((v1_funct_1 X2) \wedge (v2_finseq_1 X2))) \Rightarrow ((X2 = k12_pnproc_1 \\ & X0 X1) \Leftrightarrow ((k9_xtuple_0 X2 = ReplSep (toset (\lambda X3 : \iota.m1_subset_1 \\ & X3 k5_numbers)) (\lambda X3 : \iota.X3 \in k9_xtuple_0 X0) (\lambda X3 : \iota. \\ & k2_nat_1 X1 X3)) \wedge (\forall X3.(v7_ordinal1 X3) \Rightarrow ((X3 \in k9_xtuple_0 \\ & X0) \Rightarrow (k1_funct_1 X2 (k2_nat_1 X1 X3) = k1_funct_1 X0 X3))))))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((v1_relat_1 \\ & X1) \wedge ((v1_funct_1 X1) \wedge (v2_finseq_1 X1))) \Rightarrow (\forall X2.((v1_relat_1 \\ & X2) \wedge ((v1_funct_1 X2) \wedge (v2_finseq_1 X2))) \Rightarrow ((r1_tarski X2 X1) \Rightarrow \\ & (r1_tarski (k9_xtuple_0 (k12_pnpoc_1 X2 X0) (k9_xtuple_0 (k12_pnpoc_1 \\ & X1 X0)))))) \end{aligned}$$