

t21_pnproc_1
(TMQevC9FPBohEmw64985N4hdoiMkzkne4tn)

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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 $r1_pnproc.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal.0 : \iota \Rightarrow o$ be given. Let $r1_xxreal.0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $v2_valued.0 : \iota \Rightarrow o$ be given. Let $v1_relat.1 : \iota \Rightarrow o$ be given. Let $k1_funct.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal.0 X0) \Rightarrow (\forall X1.(v1_xxreal.0 X1) \Rightarrow ((r1_xxreal.0 X0 X1) \wedge (r1_xxreal.0 X1 X0)) \Rightarrow (X0 = X1)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(v2_membered X1) \Rightarrow (v2_valued.0 (k2_zfmisc.1 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.v1_relat.1 (k2_zfmisc.1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat.1 X0) \wedge ((v1_funct.1 X0) \wedge (v2_valued.0 X0))) \Rightarrow (v1_xxreal.0 (k1_funct.1 X0 X1)) \quad (4)$$

Assume the following.

$$m1_subset.1 k5_numbers (k1_zfmisc.1 k1_numbers) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_funct.1 X1) \wedge ((v1_funct.2 X1 X0 k5_numbers) \wedge \\ & (m1_subset.1 X1 (k1_zfmisc.1 (k2_zfmisc.1 X0 k5_numbers)))) \Rightarrow \\ & (\forall X2.((v1_funct.1 X2) \wedge ((v1_funct.2 X2 X0 k5_numbers) \wedge \\ & (m1_subset.1 X2 (k1_zfmisc.1 (k2_zfmisc.1 X0 k5_numbers)))) \Rightarrow \\ & ((r2_pnproc.1 X0 X1 X2) \Leftrightarrow (\forall X3.(X3 \in X0) \Rightarrow (r1_xxreal.0 (k1_funct.1 \\ & X1 X3) (k1_funct.1 X2 X3)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 k5_numbers) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 k5_numbers) \wedge \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& ((r1_pnproc_1 X0 X1 X2) \Leftrightarrow (\forall X3. (X3 \in X0) \Rightarrow (k1_funct_1 X1 X3 = \\
& k1_funct_1 X2 X3))))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (v3_membered X0) \tag{8}$$

Assume the following.

$$\forall X0. (v3_membered X0) \Rightarrow (v2_membered X0) \tag{9}$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_relat_1 X1)) \tag{10}$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v2_valued_0 X0)) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v2_valued_0 X1)) \tag{11}$$

Theorem 1

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 k5_numbers) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 k5_numbers) \wedge \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k5_numbers)))))) \Rightarrow \\
& (((r2_pnproc_1 X0 X1 X2) \wedge (r2_pnproc_1 X0 X2 X1)) \Rightarrow (r1_pnproc_1 \\
& X0 X1 X2))
\end{aligned}$$