

t43_complsp2

(TMKuRucwz4UxmsnUqg9phT67eckPCfmY9aj)

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Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k12_seq_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_seq_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k24_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k45_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ 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 $k5_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ & (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_valued_0 \\ & X1))) \Rightarrow (\forall X2.(v1_xcmplx_0 X2) \Rightarrow (k24_valued_1 (k45_valued_1 \\ & X0 X1) X2 = k45_valued_1 (k24_valued_1 X0 X2) (k24_valued_1 X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_finseq_1 X0 k2_numbers) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k12_seq_4 X0 X1 = k24_valued_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_finseq_1 X0 k2_numbers) \wedge (m1_finseq_1 X1 k2_numbers)) \Rightarrow (k10_seq_4 X0 X1 = k45_valued_1 X0 X1) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m2_finseq_1 X1 X0) \Rightarrow ((v1_funct_1 X1) \wedge \\ & (v1_finseq_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & X0)))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge(v1_funct_1 X1)\wedge(v1_finseq_1 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((m1_finseq_1 X0 k2_numbers)\wedge(v1_xcmplx_0 X1))\Rightarrow(m2_finseq_1 (k12_seq_4 X0 X1) k2_numbers) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((m1_finseq_1 X0 k2_numbers)\wedge(m1_finseq_1 X1 k2_numbers))\Rightarrow(m2_finseq_1 (k10_seq_4 X0 X1) k2_numbers) \quad (8)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k2_numbers)\Rightarrow(v1_valued_0 X0) \quad (9)$$

Theorem 1

$$\begin{aligned} &\forall X0.(v1_xcmplx_0 X0)\Rightarrow(\forall X1.(m2_finseq_1 X1 k2_numbers)\Rightarrow \\ &(\forall X2.(m2_finseq_1 X2 k2_numbers)\Rightarrow((k3_finseq_1 X1 = k3_finseq_1 \\ &X2)\Rightarrow(k12_seq_4 (k10_seq_4 X1 X2) X0 = k10_seq_4 (k12_seq_4 X1 X0) \\ &(k12_seq_4 X2 X0)))))) \end{aligned}$$