

t64_complsp2

(TMLaXVnfZ5ynvYRLUvBrzgrwterZUfL8ceo)

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Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k12_seq_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_seq_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_seq_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_binop_2 : \iota \Rightarrow \iota$ be given. Let $k11_seq_4 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k24_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k30_valued_1 : \iota \Rightarrow \iota$ be given. Let $k45_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v1_membered : \iota \Rightarrow o$ 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. Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k2_numbers) \Rightarrow (\forall X1.(v1_xcmplx_0 \\ X1) \Rightarrow (\forall X2.(v1_xcmplx_0 X2) \Rightarrow (k12_seq_4 X0 (k3_binop_2 X1 \\ X2) = k9_seq_4 (k12_seq_4 X0 X1) (k12_seq_4 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k2_numbers) \Rightarrow (\forall X1.(v1_xcmplx_0 \\ X1) \Rightarrow (k12_seq_4 X0 (k1_binop_2 X1) = k11_seq_4 (k12_seq_4 X0 X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (\\ k2_xcmplx_0 X0 (k4_xcmplx_0 X1) = k6_xcmplx_0 X0 X1) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_finseq_1 X0 k2_numbers) \wedge (m1_finseq_1 \\ X1 k2_numbers)) \Rightarrow (k9_seq_4 X0 X1 = k1_valued_1 X0 X1) \end{aligned} \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(k4_binop_2 X0 X1 = k6_xcmplx_0 X0 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(k3_binop_2 X0 X1 = k2_xcmplx_0 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(k1_binop_2 X0 = k4_xcmplx_0 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((m1_finseq_1 X0 k2_numbers)\wedge(v1_xcmplx_0 X1))\Rightarrow(k12_seq_4 X0 X1 = k24_valued_1 X0 X1) \quad (10)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k2_numbers)\Rightarrow(k11_seq_4 X0 = k30_valued_1 X0) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((m1_finseq_1 X0 k2_numbers)\wedge(m1_finseq_1 X1 k2_numbers))\Rightarrow(k10_seq_4 X0 X1 = k45_valued_1 X0 X1) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\wedge(v1_xcmplx_0 X1))\Rightarrow((v1_relat_1 (k24_valued_1 X0 X1))\wedge((v1_funct_1 (k24_valued_1 X0 X1))\wedge(v1_valued_0 (k24_valued_1 X0 X1)))) \quad (13)$$

Assume the following.

$$v1_membered k2_numbers \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Rightarrow((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge(v1_funct_1 X1)\wedge(v1_finseq_1 X1)) \quad (16)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(v1_xcmplx_0 (k4_xcmplx_0 X0)) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.((m1_finseq_1 X0 k2_numbers)\wedge(v1_xcmplx_0 X1))\Rightarrow(m2_finseq_1 (k12_seq_4 X0 X1) k2_numbers) \quad (18)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow \\ (\forall X1.((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_valued_0 X1))))\Rightarrow(k45_valued_1 X0 X1 = k1_valued_1 X0 (k30_valued_1 X1)) \end{aligned} \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.(v1_membered X1)\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_valued_0 X2)) \quad (20)$$

Theorem 1

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k2_numbers)\Rightarrow(\forall X1.(v1_xcmplx_0 X1)\Rightarrow(\forall X2.(v1_xcmplx_0 X2)\Rightarrow(k12_seq_4 X0 (k4_binop_2 X1 X2) = k10_seq_4 (k12_seq_4 X0 X1) (k12_seq_4 X0 X2)))) \end{aligned}$$