t42_complsp2 (TMQ3ThsSDyeJKCyC5CAb77W2HK3U5LVBLio)

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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 $k11\_seq\_4 : \iota \Rightarrow \iota$ be given. Let $k12\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $v1\_valued\_0 : \iota \Rightarrow o$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k30\_valued\_1 : \iota \Rightarrow \iota$ be given. Let $k17\_seq\_4 : \iota \Rightarrow \iota$ be given. Let $k1\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1\_membered : \iota \Rightarrow o$ 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.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finseq\_1\ X0) \wedge (v1\_valued\_0\ X0)))) \Rightarrow (k3\_finseq\_1\ (k30\_valued\_1\ X0) = k3\_finseq\_1\ X0) \tag{1}$$

Assume the following.

$$\forall X0.(m2\_finseq\_1\ X0\ k2\_numbers) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (k12\_seq\_4\ (k17\_seq\_4\ (k3\_finseq\_1\ X0))\ X1 = k17\_seq\_4\ (k3\_finseq\_1\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ k2\_numbers) \Rightarrow (k3\_finseq\_1\ (k12\_seq\_4\ X1\ X0) = k3\_finseq\_1\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finseq\_1\ X0) \wedge (v1\_valued\_0\ X0)))) \Rightarrow (k1\_valued\_1\ X0\ (k30\_valued\_1\ X0) = k17\_seq\_4\ (k3\_finseq\_1\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge((v1\_finseq\_1\ X0)\wedge(v1\_valued\_0\ X0))))\Rightarrow(\forall X1.((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge((v1\_finseq\_1\ X1)\wedge(v1\_valued\_0\ X1))))\Rightarrow(((k3\_finseq\_1\ X0 = k3\_finseq\_1\ X1)\wedge(k1\_valued\_1\ X0\ X1 = k17\_seq\_4\ (k3\_finseq\_1\ X0)))\Rightarrow((X0 = k30\_valued\_1\ X1)\wedge(X1 = k30\_valued\_1\ X0)))) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(\forall X1.(m2\_finseq\_1\ X1\ k2\_numbers)\Rightarrow(\forall X2.(m2\_finseq\_1\ X2\ k2\_numbers)\Rightarrow((k3\_finseq\_1\ X1 = k3\_finseq\_1\ X2)\Rightarrow(k12\_seq\_4\ (k9\_seq\_4\ X1\ X2)\ X0 = k9\_seq\_4\ (k12\_seq\_4\ X1\ X0)\ (k12\_seq\_4\ X2\ X0))))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0)\Leftrightarrow(m1\_finseq\_1\ X1\ X0) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_finseq\_1\ X0\ k2\_numbers)\wedge(m1\_finseq\_1\ X1\ k2\_numbers))\Rightarrow(k9\_seq\_4\ X0\ X1 = k1\_valued\_1\ X0\ X1) \tag{8}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_finseq\_1\ X0\ k2\_numbers)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k12\_seq\_4\ X0\ X1 = k24\_valued\_1\ X0\ X1) \tag{10}$$

Assume the following.

$$\forall X0.(m1\_finseq\_1\ X0\ k2\_numbers)\Rightarrow(k11\_seq\_4\ X0 = k30\_valued\_1\ X0) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge((v1\_valued\_0\ X0)\wedge(v1\_finseq\_1\ X0))))\wedge(v1\_xcmplx\_0\ X1))\Rightarrow((v1\_relat\_1\ (k24\_valued\_1\ X0\ X1))\wedge((v1\_funct\_1\ (k24\_valued\_1\ X0\ X1))\wedge(v1\_finseq\_1\ (k24\_valued\_1\ X0\ X1)))) \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\wedge(v1\_xcmplx\_0\ X1))\Rightarrow((v1\_relat\_1\ (k24\_valued\_1\ X0\ X1))\wedge((v1\_funct\_1\ (k24\_valued\_1\ X0\ X1))\wedge(v1\_valued\_0\ (k24\_valued\_1\ X0\ X1)))) \tag{13}$$

Assume the following.

$$v1\_membered\ k2\_numbers \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0)\Rightarrow((v1\_funct\_1\ X1)\wedge((v1\_finseq\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ X0))))) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_finseq\_1\ X0\ k2\_numbers)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(m2\_finseq\_1\ (k12\_seq\_4\ X0\ X1)\ k2\_numbers) \tag{17}$$

Assume the following.

$$\forall X0.(m1\_finseq\_1\ X0\ k2\_numbers)\Rightarrow(m2\_finseq\_1\ (k11\_seq\_4\ X0)\ k2\_numbers) \tag{18}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_membered\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_valued\_0\ X2)) \tag{19}$$

Theorem 1

$$\forall X0.(m2\_finseq\_1\ X0\ k2\_numbers)\Rightarrow(\forall X1.(v1\_xcmplx\_0\ X1)\Rightarrow(k11\_seq\_4\ (k12\_seq\_4\ X0\ X1) = k12\_seq\_4\ (k11\_seq\_4\ X0)\ X1))$$