

t72\_complsp2 (TM-  
PJWnn6khHBMqEgk4S5cx5xYx1hhBrEDoD)

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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  $k8\_complsp2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $k1\_binop\_2 : \iota \Rightarrow \iota$  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  $k30\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  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  $k45\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  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. Let  $k5\_numbers : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2\_finseq\_1 X0 k2\_numbers) \Rightarrow (\forall X1.(m2\_finseq\_1 \\ & X1 k2\_numbers) \Rightarrow (\forall X2.(m2\_finseq\_1 X2 k2\_numbers) \Rightarrow (((k3\_finseq\_1 \\ & X0 = k3\_finseq\_1 X1) \wedge (k3\_finseq\_1 X1 = k3\_finseq\_1 X2)) \Rightarrow (k8\_complsp2 \\ & X0 (k9\_seq\_4 X1 X2) = k3\_binop\_2 (k8\_complsp2 X0 X1) (k8\_complsp2 \\ & X0 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2\_finseq\_1 X0 k2\_numbers) \Rightarrow (\forall X1.(m2\_finseq\_1 \\ & X1 k2\_numbers) \Rightarrow ((k3\_finseq\_1 X0 = k3\_finseq\_1 X1) \Rightarrow (k8\_complsp2 \\ & X0 (k11\_seq\_4 X1) = k1\_binop\_2 (k8\_complsp2 X0 X1)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2\_finseq\_1 X0 k2\_numbers) \Rightarrow (\forall X1.(m2\_finseq\_1 \\ & X1 k2\_numbers) \Rightarrow ((k3\_finseq\_1 X0 = k3\_finseq\_1 X1) \Rightarrow (k8\_complsp2 \\ & (k11\_seq\_4 X0) X1 = k1\_binop\_2 (k8\_complsp2 X0 X1)))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge((v1\_finseq\_1 X0)\wedge(v1\_valued\_0 X0))))\Rightarrow(k3\_finseq\_1 (k30\_valued\_1 X0) = k3\_finseq\_1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0)\wedge(v1\_xcmplx\_0 X1))\Rightarrow(k2\_xcmplx\_0 X0 (k4\_xcmplx\_0 X1) = k6\_xcmplx\_0 X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0)\Leftrightarrow(m1\_finseq\_1 X1 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_finseq\_1 X0 k2\_numbers)\wedge(m1\_finseq\_1 X1 k2\_numbers))\Rightarrow(k9\_seq\_4 X0 X1 = k1\_valued\_1 X0 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0)\wedge(v1\_xcmplx\_0 X1))\Rightarrow(k4\_binop\_2 X0 X1 = k6\_xcmplx\_0 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0)\wedge(v1\_xcmplx\_0 X1))\Rightarrow(k3\_binop\_2 X0 X1 = k2\_xcmplx\_0 X0 X1) \quad (9)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0)\Rightarrow(k1\_binop\_2 X0 = k4\_xcmplx\_0 X0) \quad (10)$$

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.

$$v1\_membered\ k2\_numbers \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0)\Rightarrow((v1\_funct\_1 X1)\wedge((v1\_finseq\_1 X1)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers X0)))))) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0)\Rightarrow((v1\_relat\_1 X1)\wedge(v1\_funct\_1 X1)\wedge(v1\_finseq\_1 X1)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_finseq\_1 X0 k2\_numbers)\wedge(m1\_finseq\_1 X1 k2\_numbers))\Rightarrow(m1\_subset\_1 (k8\_complsp2 X0 X1) k2\_numbers) \quad (16)$$

Assume the following.

$$\forall X0.(m1\_finseq\_1 X0 k2\_numbers)\Rightarrow(m2\_finseq\_1 (k11\_seq\_4 X0) k2\_numbers) \quad (17)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge(v1\_valued\_0 X0)))\Rightarrow(\forall X1.((v1\_relat\_1 X1)\wedge((v1\_funct\_1 X1)\wedge(v1\_valued\_0 X1))))\Rightarrow(k45\_valued\_1 X0 X1 = k1\_valued\_1 X0 (k30\_valued\_1 X1)) \quad (18)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k2\_numbers)\Rightarrow(v1\_xcmplx\_0 X0) \quad (19)$$

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**

$$\forall X0.(m2\_finseq\_1 X0 k2\_numbers)\Rightarrow(\forall X1.(m2\_finseq\_1 X1 k2\_numbers)\Rightarrow(\forall X2.(m2\_finseq\_1 X2 k2\_numbers)\Rightarrow(((k3\_finseq\_1 X0 = k3\_finseq\_1 X1)\wedge(k3\_finseq\_1 X1 = k3\_finseq\_1 X2))\Rightarrow(k8\_complsp2 X0 (k10\_seq\_4 X1 X2) = k4\_binop\_2 (k8\_complsp2 X0 X1) (k8\_complsp2 X0 X2))))))$$