

# t15\_complsp2 (TMcxhfhocnMaRBvucY- dVQ2y9QfaxMmpHkXE)

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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  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k12\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k24\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $k5\_numbers : \iota$  be given. Let  $v1\_valued\_0 : \iota \Rightarrow o$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (1)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow (k4\_finseq\_1 X0 = k9\_xtuple\_0 X0) \quad (2)$$

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.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Rightarrow ((v1\_funct\_1 X1) \wedge ((v1\_finseq\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers X0)))))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_finseq\_1 X1 X0) \Rightarrow ((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 X1))) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. ((m1\_finseq\_1 X0 k2\_numbers) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow (m2\_finseq\_1 (k12\_seq\_4 X0 X1) k2\_numbers) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 X0))) \Rightarrow \\ & \quad (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (\forall X2.((v1\_relat\_1 X2) \wedge (v1\_funct\_1 X2)) \Rightarrow ((X2 = k24\_valued\_1 X0 X1) \Leftrightarrow ((k9\_xtuple\_0 X2 = k9\_xtuple\_0 \\ & \quad X0) \wedge (\forall X3.(X3 \in k9\_xtuple\_0 X2) \Rightarrow (k1\_funct\_1 X2 X3 = k3\_xcmplx\_0 \\ & \quad X1 (k1\_funct\_1 X0 X3))))))) \end{aligned} \tag{7}$$

Assume the following.

$$\forall X0.(m1\_finseq\_1 X0 k2\_numbers) \Rightarrow (v1\_valued\_0 X0) \tag{8}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m2\_finseq\_1 X0 k2\_numbers) \Rightarrow (\forall X1.(v1\_xcmplx\_0 \\ & X1) \Rightarrow (k4\_finseq\_1 (k12\_seq\_4 X0 X1) = k4\_finseq\_1 X0)) \end{aligned}$$