

## t85\_finseq\_6

(TMPMTMBo6hTvkNhS9s3pkZNEhNBYVPe5jYh)

October 27, 2020

Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_finseq\_5 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k17\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_rfinseq : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_5 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  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. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (\forall X2. \\ (\neg v1\_xboole\_0 X2) \Rightarrow (\forall X3.(m2\_finseq\_1 X3 X2) \Rightarrow ((k2\_xcmplx\_0 \\ X0 X1 = k3\_finseq\_1 X3) \Rightarrow (k4\_finseq\_5 X2 (k2\_rfinseq X2 X1 X3) = k17\_finseq\_1 \\ X2 X0 (k4\_finseq\_5 X2 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0) \Rightarrow (k4\_finseq\_5 X0 X1 = k3\_finseq\_5 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0) \Rightarrow (k4\_finseq\_5 X0 (k4\_finseq\_5 X0 X1) = X1) \quad (4)$$

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.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0)\Rightarrow(m2\_finseq\_1 (k4\_finseq\_5 X0 X1) X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7\_ordinal1 X1)\wedge(m1\_finseq\_1 X2 X0))\Rightarrow(m2\_finseq\_1 (k2\_rfinseq X0 X1 X2) X0) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge(v1\_finseq\_1 X0)))\Rightarrow \\ (\forall X1.((v1\_relat\_1 X1)\wedge((v1\_funct\_1 X1)\wedge(v1\_finseq\_1 X1)))\Rightarrow((X1 = k3\_finseq\_5 X0)\Leftrightarrow((k3\_finseq\_1 X1 = k3\_finseq\_1 X0)\wedge \\ (\forall X2.(v7\_ordinal1 X2)\Rightarrow((X2 \in k4\_finseq\_1 X1)\Rightarrow(k1\_funct\_1 X1 X2 = k1\_funct\_1 X0 (k2\_xcmplx\_0 (k6\_xcmplx\_0 (k3\_finseq\_1 X0) X2) np\_1))))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0)\wedge(v1\_xcmplx\_0 X1))\Rightarrow(k2\_xcmplx\_0 X0 X1 = k2\_xcmplx\_0 X1 X0) \quad (10)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow(v1\_xcmplx\_0 X0) \quad (11)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0)\Rightarrow(v1\_xreal\_0 X0) \quad (12)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v7\_ordinal1 X0)\Rightarrow(\forall X1.(v7\_ordinal1 X1)\Rightarrow(\forall X2. \\ (\neg v1\_xboole\_0 X2)\Rightarrow(\forall X3.(m2\_finseq\_1 X3 X2)\Rightarrow((k2\_xcmplx\_0 X0 X1 = k3\_finseq\_1 X3)\Rightarrow(k4\_finseq\_5 X2 (k17\_finseq\_1 X2 X1 X3) = \\ k2\_rfinseq X2 X0 (k4\_finseq\_5 X2 X3)))))) \end{aligned}$$