

t78\_finseq\_5 (TMRNhUfUXR-  
PYJG2Z3bXagqtfn2QvrcAREjM)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k17\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k16\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_finseq\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7\_ordinal1 X1) \wedge (m1\_finseq\_1 X2 X0)) \Rightarrow (k17\_finseq\_1 X0 X1 X2 = k16\_finseq\_1 X1 X2) \quad (2)$$

Assume the following.

$$\forall X0.\exists X1.(m1\_finseq\_1 X1 X0) \wedge ((v1\_relat\_1 X1) \wedge ((v4\_relat\_1 X1 k5\_numbers) \wedge ((v5\_relat\_1 X1 X0) \wedge ((v1\_funct\_1 X1) \wedge ((v1\_xboole\_0 X1) \wedge ((v1\_finset\_1 X1) \wedge (v1\_finseq\_1 X1))))))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xboole\_0 X0) \wedge (v1\_relat\_1 X0)) \Rightarrow ((v1\_xboole\_0 (k5\_relat\_1 X0 X1)) \wedge (v1\_relat\_1 (k5\_relat\_1 X0 X1))) \quad (4)$$

Assume the following.

$$\forall X0.k6\_finseq\_1 X0 = k1\_xboole\_0 \quad (5)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 X1))) \Rightarrow (k16\_finseq\_1 X0 X1 = k5\_relat\_1 X1 (k2\_finseq\_1 X0))) \quad (6)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge(v1\_xboole\_0 X0))\Rightarrow((v1\_relat\_1 X0)\wedge(v1\_finseq\_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0)\Rightarrow(v1\_relat\_1 X0) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0)\Rightarrow(v1\_funct\_1 X0) \quad (9)$$

**Theorem 1**

$$\forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.(v7\_ordinal1 X1)\Rightarrow(k17\_finseq\_1 X0 X1 (k6\_finseq\_1 X0) = k6\_finseq\_1 X0))$$