

## t92\_finseq\_2

(TMXAt4v4pFcAWx1PwKMMJ4K8r3i8wETkGQ3)

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Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow o$  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  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $k13\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  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  $k1\_numbers : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (&(\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ &(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 \\ &X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_finseq\_2 X1 X0) \Rightarrow (\forall X2. (m2\_finseq\_2 X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (4)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0. k3\_finseq\_2 X0 = k13\_finseq\_1 X0 \quad (6)$$

Assume the following.

$$(\neg v1\_xboole\_0 \ k4\_ordinal1) \wedge (v3\_ordinal1 \ k4\_ordinal1) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_finseq\_1 \ X1 \ X0) \Rightarrow ((v1\_relat\_1 \ X1) \wedge (v1\_funct\_1 \ X1) \wedge (v1\_finseq\_1 \ X1)) \quad (8)$$

Assume the following.

$$m1\_subset\_1 \ k5\_numbers \ (k1\_zfmisc\_1 \ k1\_numbers) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. (v7\_ordinal1 \ X0) \Rightarrow (m1\_finseq\_2 \ (k4\_finseq\_2 \ X0 \ X1) \ X1) \quad (10)$$

Assume the following.

$$\forall X0. m1\_finseq\_2 \ (k3\_finseq\_2 \ X0) \ X0 \quad (11)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 \ X0) \wedge ((v1\_funct\_1 \ X0) \wedge (v1\_finseq\_1 \ X0))) \Rightarrow (m2\_subset\_1 \ (k3\_finseq\_1 \ X0) \ k1\_numbers \ k5\_numbers) \quad (12)$$

Assume the following.

$$\forall X0. (v7\_ordinal1 \ X0) \Rightarrow (\forall X1. k4\_finseq\_2 \ X0 \ X1 = \text{ReplSep} \ (to\text{set} \ (\lambda X2 : \iota. m2\_finseq\_2 \ X2 \ X1 \ (k3\_finseq\_2 \ X1))) \ (\lambda X2 : \iota. k3\_finseq\_1 \ X2 = X0) \ (\lambda X2 : \iota. X2)) \quad (13)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k13\_finseq\_1 \ X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (m2\_finseq\_1 \ X2 \ X0)) \quad (14)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \ X0 \ k4\_ordinal1) \Rightarrow (v7\_ordinal1 \ X0) \quad (15)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 \ X0) \Rightarrow (\forall X1. (m1\_subset\_1 \ X1 \ (k1\_zfmisc\_1 \ X0)) \Rightarrow (v1\_xboole\_0 \ X1)) \quad (16)$$

**Theorem 1**

$$\forall X0. \forall X1. (m2\_finseq\_1 \ X1 \ X0) \Rightarrow (m2\_finseq\_2 \ X1 \ X0 \ (k4\_finseq\_2 \ (k3\_finseq\_1 \ X1) \ X0))$$