

t110\_finseq\_2

(TMJZe4cDXme53752wKLRWL7iv1xj45MK5Ha)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k4\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 X0) \wedge (\neg v1\_xboole\_0 X1)) \Rightarrow (\neg v1\_xboole\_0 (k4\_finseq\_2 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. (v7\_ordinal1 X0) \Rightarrow (\forall X1. k4\_finseq\_2 X0 X1 = ReplSep (toset (\lambda X2 : \iota. m2\_finseq\_2 X2 X1 (k3\_finseq\_2 X1)))) (\lambda X2 : \iota. k3\_finseq\_1 X2 = X0) (\lambda X2 : \iota. X2)) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Leftrightarrow (\forall X1. \neg X1 \in X0) \quad (3)$$

**Theorem 1**

$$\forall X0. (v7\_ordinal1 X0) \Rightarrow (\forall X1. (v7\_ordinal1 X1) \Rightarrow (\forall X2. \forall X3. (\neg v1\_xboole\_0 X3) \Rightarrow ((k4\_finseq\_2 X0 X3 = k4\_finseq\_2 X1 X2) \Rightarrow (X0 = X1))))$$