

## t49\_finseq\_2

(TMc6NaN2YsVdUdNYNHtHeRrdZRNMGerMyKo)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_partfun1 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (k1\_funct\_1 (k4\_relat\_1 X1) X0 = X0) \quad (2)$$

Assume the following.

$$\forall X0.k6\_partfun1 X0 = k4\_relat\_1 X0 \quad (3)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 (k4\_relat\_1 X0)) \wedge ((v4\_relat\_1 (k4\_relat\_1 X0) X0) \wedge (v5\_relat\_1 (k4\_relat\_1 X0) X0)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X0) \wedge ((v3\_relat\_1 X0) \wedge (v1\_funct\_1 X0))) \Rightarrow (v1\_xboole\_0 (k1\_funct\_1 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow ((v1\_relat\_1 (k1\_finseq\_2 X0)) \wedge ((v1\_funct\_1 (k1\_finseq\_2 X0)) \wedge (v1\_finseq\_1 (k1\_finseq\_2 X0)))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0) \Rightarrow ((m1\_subset\_1 X1 X0) \Leftrightarrow (X1 \in X0))) \wedge ((v1\_xboole\_0 X0) \Rightarrow ((m1\_subset\_1 X1 X0) \Leftrightarrow (v1\_xboole\_0 X1))) \quad (7)$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (k1\_finseq\_2\ X0 = k6\_partfun1\ (k2\_finseq\_1\ X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge (v5\_relat\_1\ X1\ X0)) \Rightarrow ((v1\_xboole\_0\ X1) \wedge ((v1\_relat\_1\ X1) \wedge (v5\_relat\_1\ X1\ X0)))) \quad (9)$$

Assume the following.

$$\forall X0.((v1\_xboole\_0\ X0) \wedge (v1\_relat\_1\ X0)) \Rightarrow ((v1\_relat\_1\ X0) \wedge (v3\_relat\_1\ X0)) \quad (10)$$

**Theorem 1**

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k2\_finseq\_1\ X0)) \Rightarrow (k1\_funct\_1\ (k1\_finseq\_2\ X0)\ X1 = X1))$$