

## l15\_finseq\_2

(TMVt1uvAfM5tuZT1SjD16ieEPeuJK18rEEu)

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Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k11\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k10\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_finseq\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (k11\_finseq\_1 X0 X1 X2 = k7\_finseq\_1 \\ & (k9\_finseq\_1 X0) (k10\_finseq\_1 X1 X2)) \wedge (k11\_finseq\_1 X0 X1 X2 = \\ & k7\_finseq\_1 (k10\_finseq\_1 X0 X1) (k9\_finseq\_1 X2)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 \\ & X1))) \Rightarrow ((X1 = k9\_finseq\_1 X0) \Leftrightarrow ((k4\_finseq\_1 X1 = k2\_finseq\_1 np\_1) \wedge \\ & (k10\_xtuple\_0 X1 = k1\_tarski X0))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ & (\forall X1. ((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 \\ & X1)))) \Rightarrow (k10\_xtuple\_0 (k7\_finseq\_1 X0 X1) = k2\_xboole\_0 (k10\_xtuple\_0 \\ & X0) (k10\_xtuple\_0 X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. k1\_enumset1 X0 X1 X2 = k2\_xboole\_0 \\ & (k1\_tarski X0) (k2\_tarski X1 X2) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. k9\_finseq\_1 X0 = k5\_finseq\_1 X0 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.k10\_xtuple\_0 (k10\_finseq\_1 X0 X1) = k2\_tarSKI X0 X1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1 (k10\_finseq\_1 X0 X1)) \wedge (v1\_funct\_1 (k10\_finseq\_1 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.v1\_finseq\_1 (k5\_finseq\_1 X0) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 (k5\_finseq\_1 X0)) \wedge (v1\_funct\_1 (k5\_finseq\_1 X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.v1\_finseq\_1 (k10\_finseq\_1 X0 X1) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.k10\_finseq\_1 X0 X1 = k7\_finseq\_1 (k9\_finseq\_1 X0) (k9\_finseq\_1 X1) \quad (11)$$

**Theorem 1**

$$\forall X0.\forall X1.\forall X2.k10\_xtuple\_0 (k11\_finseq\_1 X0 X1 X2) = k1\_enumset1 X0 X1 X2$$