

t14\_finseq\_2 (TMRJ-  
CUSYw2dK3YYUaM6M7GSbX4SvQRcp3XJ)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k11\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  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. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1\_xboole\_0 X0) \wedge \\ & ((m1\_subset\_1 X1 X0) \wedge ((m1\_subset\_1 X2 X0) \wedge (m1\_subset\_1 X3 X0)))) \Rightarrow \\ & (k8\_domain\_1 X0 X1 X2 X3 = k1\_enumset1 X1 X2 X3) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k10\_xtuple\_0 (k11\_finseq\_1 X0 X1 X2) = k1\_enumset1 X0 X1 X2 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (v1\_relat\_1 (k11\_finseq\_1 X0 X1 X2)) \wedge (v1\_funct\_1 (k11\_finseq\_1 X0 X1 X2)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. v1\_finseq\_1 (k11\_finseq\_1 X0 X1 X2) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_xboole\_0 X0)\wedge \\ & ((m1\_subset\_1 X1 X0)\wedge((m1\_subset\_1 X2 X0)\wedge(m1\_subset\_1 X3 X0))))\Rightarrow \\ & (m1\_subset\_1 (k8\_domain\_1 X0 X1 X2 X3) (k1\_zfmisc\_1 X0)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1\_relat\_1 X1)\wedge((v1\_funct\_1 X1)\wedge(v1\_finseq\_1 \\ & X1)))\Rightarrow((m1\_finseq\_1 X1 X0)\Leftrightarrow(r1\_tarski (k10\_xtuple\_0 X1) X0)) \end{aligned} \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.(m1\_subset\_1 X1 X0)\Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 X0)\Rightarrow(\forall X3.(m1\_subset\_1 X3 X0)\Rightarrow \\ & (m2\_finseq\_1 (k11\_finseq\_1 X1 X2 X3) X0)))) \end{aligned}$$