

t136\_finseq\_3  
(TMQH2Mx9qnVSwcLU3uLp3VTPfLB5z3Csy28)

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Let  $k3\_card\_3 : \iota \Rightarrow \iota$  be given. Let  $k10\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_funct\_6 : \iota \Rightarrow \iota$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_setfam\_1 : \iota \Rightarrow \iota$  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. Assume the following.

$$\forall X0. \forall X1. k3\_tarski (k2\_tarski X0 X1) = k2\_xboole\_0 X0 X1 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k1\_setfam\_1 (k2\_tarski X0 X1) = k3\_xboole\_0 X0 X1 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k10\_xtuple\_0 (k10\_finseq\_1 X0 X1) = k2\_tarski X0 X1 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 (k10\_finseq\_1 X0 X1) \wedge (v1\_funct\_1 (k10\_finseq\_1 X0 X1))) \quad (4)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (k4\_funct\_6 X0 = k1\_setfam\_1 (k10\_xtuple\_0 X0)) \quad (5)$$

Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (k3\_card\_3 X0 = k3\_tarski (k10\_xtuple\_0 X0)) \quad (6)$$

**Theorem 1**

$$\forall X0. \forall X1. (k3\_card\_3 (k10\_finseq\_1 X0 X1) = k2\_xboole\_0 X0 X1) \wedge (k4\_funct\_6 (k10\_finseq\_1 X0 X1) = k3\_xboole\_0 X0 X1)$$