

t90\_finseq\_3  
(TMHutt3i98BBnTtsBpSU3QaMHD7nWcv8ThZ)

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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  $v2\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_finseq\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ & (\forall X1.(v1\_finset\_1 X1) \Rightarrow (((v2\_funct\_1 X0) \wedge (r1\_tarski X1 \\ & (k10\_xtuple\_0 X0))) \Rightarrow (k3\_finseq\_1 (k1\_finseq\_3 X0 X1) = k6\_xcmplx\_0 \\ & (k3\_finseq\_1 X0) (k5\_card\_1 X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski (k1\_tarski X0) X1) \Leftrightarrow (X0 \in X1) \tag{2}$$

Assume the following.

$$\forall X0. k1\_card\_1 (k1\_tarski X0) = np\_1 \tag{3}$$

Assume the following.

$$\forall X0. (v1\_finset\_1 X0) \Rightarrow (k5\_card\_1 X0 = k1\_card\_1 X0) \tag{4}$$

Assume the following.

$$\forall X0. v1\_finset\_1 (k1\_tarski X0) \tag{5}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ & (\forall X1.((v2\_funct\_1 X0) \wedge (X1 \in k10\_xtuple\_0 X0)) \Rightarrow (k3\_finseq\_1 \\ & (k1\_finseq\_3 X0 (k1\_tarski X1)) = k6\_xcmplx\_0 (k3\_finseq\_1 X0) \\ & np\_1)) \end{aligned}$$