

# t63\_finseq\_3 (TMGFmDza- yWz72Rqg9qWTQqwnAb9WCSqskWt)

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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  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k1\_finseq\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ & (\forall X1.r1\_xxreal\_0 (k3\_finseq\_1 (k1\_finseq\_3 X0 X1)) (k3\_finseq\_1 X0)) \quad (1) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ & (\forall X1.((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 X1))) \Rightarrow ((r1\_xxreal\_0 (k3\_finseq\_1 X0) (k3\_finseq\_1 X1)) \Leftrightarrow (r1\_tarski \\ & (k1\_relset\_1 k5\_numbers X0) (k1\_relset\_1 k5\_numbers X1)))) \quad (2) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ & ((v1\_relat\_1 (k1\_finseq\_3 X0 X1)) \wedge ((v1\_funct\_1 (k1\_finseq\_3 X0 X1)) \wedge (v1\_finseq\_1 (k1\_finseq\_3 X0 X1)))) \quad (3) \end{aligned}$$

## Theorem 1

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ & (\forall X1.r1\_tarski (k1\_relset\_1 k5\_numbers (k1\_finseq\_3 X0 X1)) (k1\_relset\_1 k5\_numbers X0)) \end{aligned}$$