

t28\_finseq\_4  
(TMR8tqzBNEnHdxJYG8nNByaoQgDZerhGMxt)

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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  $r2\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k4\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1.(r2\_finseq\_4 \\ X0 X1) \Leftrightarrow (\exists X2.k1\_tarski X2 = k8\_relat\_1 X0 (k1\_tarski X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1.(r2\_finseq\_4 \\ X0 X1) \Rightarrow (X1 \in k10\_xtuple\_0 X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ (\forall X1.(r2\_finseq\_4 X0 X1) \Rightarrow (k1\_finseq\_4 X0 X1 = k4\_finseq\_4 \\ X0 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1.(r2\_finseq\_4 \\ X0 X1) \Rightarrow (k8\_relat\_1 X0 (k1\_tarski X1) = k1\_tarski (k1\_finseq\_4 X0 \\ X1))) \end{aligned} \quad (4)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ (\forall X1.(r2\_finseq\_4 X0 X1) \Leftrightarrow ((X1 \in k10\_xtuple\_0 X0) \wedge (k1\_tarski \\ (k4\_finseq\_4 X0 X1) = k8\_relat\_1 X0 (k1\_tarski X1)))) \end{aligned}$$