

t60\_finseq\_5 (TMbY-  
iMpnP2A4KAyi5dWAYwKAwKh4yZLePZA)

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Let  $k3\_finseq\_5 : \iota \Rightarrow \iota$  be given. Let  $k9\_finseq\_1 : \iota \Rightarrow \iota$  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. Let  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k5\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ ((k4\_finseq\_1 X0 = k4\_finseq\_1 (k3\_finseq\_5 X0)) \wedge (k10\_xtuple\_0 \\ X0 = k10\_xtuple\_0 (k3\_finseq\_5 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 \\ X1))) \Rightarrow ((X1 = k9\_finseq\_1 X0) \Leftrightarrow ((k4\_finseq\_1 X1 = k2\_finseq\_1 np\_1) \wedge \\ (k10\_xtuple\_0 X1 = k1\_tarski X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. k9\_finseq\_1 X0 = k5\_finseq\_1 X0 \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ (k4\_finseq\_1 X0 = k9\_xtuple\_0 X0) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. v1\_finseq\_1 (k5\_finseq\_1 X0) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1\_relat\_1 (k9\_finseq\_1 X0)) \wedge (v1\_funct\_1 (k9\_finseq\_1 \\ X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow \\ ((v1\_relat\_1 (k3\_finseq\_5 X0)) \wedge ((v1\_funct\_1 (k3\_finseq\_5 X0)) \wedge \\ (v1\_finseq\_1 (k3\_finseq\_5 X0)))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow ((X1 = \\ k9\_finseq\_1 X0) \Leftrightarrow ((k9\_xtuple\_0 X1 = k2\_finseq\_1 np\_1) \wedge (k1\_funct\_1 \\ X1 np\_1 = X0))) \end{aligned} \quad (8)$$

**Theorem 1**  $\forall X0. k3\_finseq\_5 (k9\_finseq\_1 X0) = k9\_finseq\_1 X0.$