

t67\_modelc\_3 (TMbM-  
TYy8ckudGCwLYDAkYovzzMtaA5Lhre3)

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Let  $v1\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v5\_modelc\_3 : \iota \Rightarrow o$  be given. Let  $v4\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $v5\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $v7\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $v8\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $k11\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $k12\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $r2\_modelc\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ \forall X1.((v1\_modelc\_2 X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow ( \\ ((v5\_modelc\_3 X0) \wedge (r2\_modelc\_2 X1 X0)) \Rightarrow (v5\_modelc\_3 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ (\neg(\neg v4\_modelc\_2 X0) \wedge (\neg v5\_modelc\_2 X0) \wedge (\neg v7\_modelc\_2 X0) \wedge \\ (\neg v8\_modelc\_2 X0))) \Rightarrow ((r2\_modelc\_2 (k11\_modelc\_2 X0) X0) \wedge (r2\_modelc\_2 \\ (k12\_modelc\_2 X0) X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_modelc\_2 X0) \wedge (m1\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ (v1\_modelc\_2 (k12\_modelc\_2 X0)) \wedge (m2\_finseq\_1 (k12\_modelc\_2 \\ X0) k5\_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_modelc\_2 X0) \wedge (m1\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ (v1\_modelc\_2 (k11\_modelc\_2 X0)) \wedge (m2\_finseq\_1 (k11\_modelc\_2 \\ X0) k5\_numbers)) \end{aligned} \quad (5)$$

**Theorem 1**

$$\forall X0.((v1\_modelc\_2 X0)\wedge(m2\_finseq\_1 X0 k5\_numbers))\Rightarrow((v5\_modelc\_3 X0)\Rightarrow(((\neg v4\_modelc\_2 X0)\wedge((\neg v5\_modelc\_2 X0)\wedge((\neg v7\_modelc\_2 X0)\wedge(\neg v8\_modelc\_2 X0))))\vee((v5\_modelc\_3 (k11\_modelc\_2 X0))\wedge(v5\_modelc\_3 (k12\_modelc\_2 X0))))))$$