

t39\_modelc\_2  
(TMRNrR6rYaJtRHNZ8ShAdtUeT32orwpvUco)

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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  $r3\_modelc\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $r2\_modelc\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $v6\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $k10\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_modelc\_2 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & \quad \forall X1.((v1\_modelc\_2 X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow ( \\ & (r3\_modelc\_2 X1 X0) \Rightarrow (((\neg v3\_modelc\_2 X0) \wedge (\neg v6\_modelc\_2 X0)) \vee \\ & \quad (r2\_modelc\_2 X1 (k10\_modelc\_2 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\forall X0. ((v1\_modelc\_2 X0) \wedge (m1\_finseq\_1 X0 k5\_numbers)) \Rightarrow (v1\_modelc\_2 (k3\_modelc\_2 X0)) \quad (3)$$

Assume the following.

$$\forall X0. (m1\_finseq\_1 X0 k5\_numbers) \Rightarrow (m2\_finseq\_1 (k3\_modelc\_2 X0) k5\_numbers) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & \quad ((v3\_modelc\_2 X0) \vee (v6\_modelc\_2 X0)) \Rightarrow (\forall X1. ((v1\_modelc\_2 \\ & X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow (((v3\_modelc\_2 X0) \Rightarrow ((X1 = k10\_modelc\_2 \\ & X0) \Leftrightarrow (k3\_modelc\_2 X1 = X0))) \wedge ((\neg v3\_modelc\_2 X0) \Rightarrow ((X1 = k10\_modelc\_2 \\ & X0) \Leftrightarrow (k6\_modelc\_2 X1 = X0)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ (v3\_modelc\_2 X0) \Leftrightarrow (\exists X1.((v1\_modelc\_2 X1) \wedge (m2\_finseq\_1 \\ X1 k5\_numbers)) \wedge (X0 = k3\_modelc\_2 X1))) \end{aligned} \quad (6)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ \forall X1.((v1\_modelc\_2 X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow ( \\ (r3\_modelc\_2 X0 (k3\_modelc\_2 X1)) \Rightarrow (r2\_modelc\_2 X0 X1))) \end{aligned}$$