

# l44\_modelc\_1

(TMbU9hw2UxTgxbYhqeNSDJ2E5C7KJHff596)

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Let  $v1\_modelc\_1 : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v6\_modelc\_1 : \iota \Rightarrow o$  be given. Let  $k10\_modelc\_1 : \iota \Rightarrow \iota$  be given. Let  $k14\_modelc\_1 : \iota \Rightarrow \iota$  be given. Let  $v5\_modelc\_1 : \iota \Rightarrow o$  be given. Let  $v2\_modelc\_1 : \iota \Rightarrow o$  be given. Let  $v4\_modelc\_1 : \iota \Rightarrow o$  be given. Let  $v3\_modelc\_1 : \iota \Rightarrow o$  be given. Let  $v7\_modelc\_1 : \iota \Rightarrow o$  be given. Let  $k7\_modelc\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_modelc\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_modelc\_1 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & (v5\_modelc\_1 X0) \Rightarrow ((\neg v2\_modelc\_1 X0) \wedge ((\neg v4\_modelc\_1 X0) \wedge ((\neg v3\_modelc\_1 X0) \wedge ((\neg v6\_modelc\_1 X0) \wedge (\neg v7\_modelc\_1 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_modelc\_1 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & (v3\_modelc\_1 X0) \Rightarrow ((\neg v2\_modelc\_1 X0) \wedge ((\neg v4\_modelc\_1 X0) \wedge ((\neg v5\_modelc\_1 X0) \wedge ((\neg v6\_modelc\_1 X0) \wedge (\neg v7\_modelc\_1 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_modelc\_1 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & (\neg(\neg v3\_modelc\_1 X0) \wedge ((\neg v5\_modelc\_1 X0) \wedge (\neg v6\_modelc\_1 X0))) \Rightarrow \\ & (\forall X1.((v1\_modelc\_1 X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow \\ & (((v3\_modelc\_1 X0) \Rightarrow ((X1 = k14\_modelc\_1 X0) \Leftrightarrow (k7\_modelc\_1 X1 = X0))) \wedge \\ & (((v5\_modelc\_1 X0) \Rightarrow ((X1 = k14\_modelc\_1 X0) \Leftrightarrow (k9\_modelc\_1 X1 = X0))) \wedge \\ & (\neg(\neg v3\_modelc\_1 X0) \wedge ((\neg v5\_modelc\_1 X0) \wedge (\neg(X1 = k14\_modelc\_1 \\ & X0) \Leftrightarrow (k10\_modelc\_1 X1 = X0))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_modelc\_1 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & (v6\_modelc\_1 X0) \Leftrightarrow (\exists X1.((v1\_modelc\_1 X1) \wedge (m2\_finseq\_1 \\ & X1 k5\_numbers)) \wedge (X0 = k10\_modelc\_1 X1))) \end{aligned} \quad (4)$$

## Theorem 1

$$\begin{aligned} & \forall X0.((v1\_modelc\_1 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & (v6\_modelc\_1 X0) \Rightarrow (X0 = k10\_modelc\_1 (k14\_modelc\_1 X0))) \end{aligned}$$