

## l12\_modelc\_3

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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  $v5\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $v4\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $v7\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $v8\_modelc\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k11\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k13\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $k12\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_modelc\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & \quad \forall X1. ((v1\_modelc\_2 X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow ( \\ & \quad (r2\_modelc\_2 X0 X1) \Rightarrow (m1\_subset\_1 (k1\_tarski X0) (k1\_zfmisc\_1 \\ & \quad (k13\_modelc\_2 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

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

Assume the following.

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

Assume the following.

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

**Theorem 1**

$$\begin{aligned} \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow & \\ (\neg(\neg v5\_modelc\_2 X0) \wedge (\neg v4\_modelc\_2 X0) \wedge (\neg v7\_modelc\_2 X0) \wedge & \\ (\neg v8\_modelc\_2 X0))) \Rightarrow ((m1\_subset\_1 (k1\_tarski (k11\_modelc\_2 & \\ X0)) (k1\_zfmisc\_1 (k13\_modelc\_2 X0))) \wedge (m1\_subset\_1 (k1\_tarski & \\ (k12\_modelc\_2 X0)) (k1\_zfmisc\_1 (k13\_modelc\_2 X0)))) & \end{aligned}$$