

## t71\_modelc\_2

(TMTe3uNFZtMVBoiKy57Y6P8LHhrLyJLUi74)

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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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k25\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $k43\_modelc\_2 : \iota$  be given. Let  $r7\_modelc\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_modelc\_2 : \iota \Rightarrow \iota$  be given. Let  $k4\_modelc\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_modelc\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & \quad \forall X1.((v1\_modelc\_2 X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow ( \\ & \quad \quad \forall X2.(m1\_subset\_1 X2 (k25\_modelc\_2 k43\_modelc\_2)) \Rightarrow ((r7\_modelc\_2 \\ & \quad \quad \quad X2 (k5\_modelc\_2 X0 X1)) \Leftrightarrow ((r7\_modelc\_2 X2 X0) \vee (r7\_modelc\_2 X2 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & \quad \forall X1.((v1\_modelc\_2 X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow ( \\ & \quad \quad \forall X2.(m1\_subset\_1 X2 (k25\_modelc\_2 k43\_modelc\_2)) \Rightarrow ((r7\_modelc\_2 \\ & \quad \quad \quad X2 (k4\_modelc\_2 X0 X1)) \Leftrightarrow ((r7\_modelc\_2 X2 X0) \wedge (r7\_modelc\_2 X2 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & \quad \forall X1.(m1\_subset\_1 X1 (k25\_modelc\_2 k43\_modelc\_2)) \Rightarrow ((r7\_modelc\_2 \\ & \quad \quad \quad X1 (k3\_modelc\_2 X0)) \Leftrightarrow (\neg r7\_modelc\_2 X1 X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1\_modelc\_2 X0) \wedge (m1\_finseq\_1 X0 k5\_numbers)) \wedge \\ & \quad ((v1\_modelc\_2 X1) \wedge (m1\_finseq\_1 X1 k5\_numbers))) \Rightarrow (v1\_modelc\_2 \\ & \quad \quad \quad (k4\_modelc\_2 X0 X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.((v1\_modelc\_2 X0) \wedge (m1\_finseq\_1 X0 k5\_numbers)) \Rightarrow (v1\_modelc\_2 (k3\_modelc\_2 X0)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. ((m1\_finseq\_1 X0 k5\_numbers) \wedge (m1\_finseq\_1 X1 k5\_numbers)) \Rightarrow (m2\_finseq\_1 (k4\_modelc\_2 X0 X1) k5\_numbers) \quad (7)$$

Assume the following.

$$\forall X0. (m1\_finseq\_1 X0 k5\_numbers) \Rightarrow (m2\_finseq\_1 (k3\_modelc\_2 X0) k5\_numbers) \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ & \forall X1. ((v1\_modelc\_2 X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow ( \\ & \forall X2. (m1\_subset\_1 X2 (k25\_modelc\_2 k43\_modelc\_2)) \Rightarrow ((r7\_modelc\_2 \\ & X2 (k3\_modelc\_2 (k4\_modelc\_2 X0 X1))) \Leftrightarrow (r7\_modelc\_2 X2 (k5\_modelc\_2 \\ & (k3\_modelc\_2 X0) (k3\_modelc\_2 X1)))))) \end{aligned}$$