

t40_modelc_2
(TMGvKqGsmD7KsFD5ovitjKxSNwi6kyYb9FS)

October 27, 2020

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 $k6_modelc_2 : \iota \Rightarrow \iota$ 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 $v2_modelc_2 : \iota \Rightarrow o$ 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 $k3_modelc_2 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ & \quad \forall X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\\ & \quad (r3_modelc_2 X1 X0) \Rightarrow (((\neg v3_modelc_2 X0) \wedge (\neg v6_modelc_2 X0)) \vee \\ & \quad \quad (r2_modelc_2 X1 (k10_modelc_2 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ & \quad (v6_modelc_2 X0) \Rightarrow (((\neg v2_modelc_2 X0) \wedge ((\neg v3_modelc_2 X0) \wedge ((\neg \\ & \quad v4_modelc_2 X0) \wedge ((\neg v5_modelc_2 X0) \wedge ((\neg v7_modelc_2 X0) \wedge (\neg v8_modelc_2 \\ & \quad \quad X0)))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m1_finseq_1 X0 k5_numbers)) \Rightarrow (v1_modelc_2 (k6_modelc_2 X0)) \quad (4)$$

Assume the following.

$$\forall X0. (m1_finseq_1 X0 k5_numbers) \Rightarrow (m2_finseq_1 (k6_modelc_2 X0) k5_numbers) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow & \\ ((v3_modelc_2 X0) \vee (v6_modelc_2 X0)) \Rightarrow (\forall X1.((v1_modelc_2 & \\ X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (((v3_modelc_2 X0) \Rightarrow ((X1 = k10_modelc_2 & \\ X0) \Leftrightarrow (k3_modelc_2 X1 = X0))) \wedge ((\neg v3_modelc_2 X0) \Rightarrow ((X1 = k10_modelc_2 & \\ X0) \Leftrightarrow (k6_modelc_2 X1 = X0)))))) & \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow & \\ (v6_modelc_2 X0) \Leftrightarrow (\exists X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 & \\ X1 k5_numbers)) \wedge (X0 = k6_modelc_2 X1)) & \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow & \\ \forall X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow & \\ (r3_modelc_2 X0 (k6_modelc_2 X1)) \Rightarrow (r2_modelc_2 X0 X1) & \end{aligned}$$