

t70_modelc_2 (TM- SWVKhAMq2YG79ptpavaLvnxtSAsWX4KgJ)

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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k5_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_modelc_2 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_modelc_2 : \iota \Rightarrow \iota$ be given. Let $k6_modelc_2 : \iota \Rightarrow \iota$ be given. Let $k7_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ & \quad \forall X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\\ & \quad \quad \forall X2.(m1_subset_1 X2 (k25_modelc_2 k43_modelc_2)) \Rightarrow ((r7_modelc_2 \\ & \quad \quad \quad X2 (k5_modelc_2 X0 X1)) \Leftrightarrow ((r7_modelc_2 X2 X0) \vee (r7_modelc_2 X2 X1)))))) \\ & \tag{1} \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ & \quad \forall X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\\ & \quad \quad \forall X2.(m1_subset_1 X2 (k25_modelc_2 k43_modelc_2)) \Rightarrow ((r7_modelc_2 \\ & \quad \quad \quad X2 (k4_modelc_2 X0 X1)) \Leftrightarrow ((r7_modelc_2 X2 X0) \wedge (r7_modelc_2 X2 X1)))))) \\ & \tag{2} \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ & \quad \forall X1.(m1_subset_1 X1 (k25_modelc_2 k43_modelc_2)) \Rightarrow ((r7_modelc_2 \\ & \quad \quad \quad X1 (k3_modelc_2 X0)) \Leftrightarrow (\neg r7_modelc_2 X1 X0))) \\ & \tag{3} \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Leftrightarrow (\\ & \quad \quad \quad X0 \in k9_modelc_2) \\ & \tag{4} \end{aligned}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{5}$$

Assume the following.

$$\neg v1_xboole_0 \ k9_modelc_2 \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 \ X0) \Rightarrow ((X0 = k9_modelc_2) \Leftrightarrow ((\forall X1. \\ & (X1 \in X0) \Rightarrow (m2_finseq_1 \ X1 \ k5_numbers)) \wedge ((\forall X1.(v7_ordinal1 \\ & X1) \Rightarrow (k2_modelc_2 \ X1 \in X0)) \wedge ((\forall X1.(m2_finseq_1 \ X1 \ k5_numbers) \Rightarrow \\ & ((X1 \in X0) \Rightarrow (k3_modelc_2 \ X1 \in X0))) \wedge ((\forall X1.(m2_finseq_1 \ X1 \\ & k5_numbers) \Rightarrow (\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow (((X1 \in \\ & X0) \wedge (X2 \in X0)) \Rightarrow (k4_modelc_2 \ X1 \ X2 \in X0)))) \wedge ((\forall X1.(m2_finseq_1 \\ & X1 \ k5_numbers) \Rightarrow (\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow (((X1 \in \\ & X0) \wedge (X2 \in X0)) \Rightarrow (k5_modelc_2 \ X1 \ X2 \in X0)))) \wedge ((\forall X1.(m2_finseq_1 \\ & X1 \ k5_numbers) \Rightarrow ((X1 \in X0) \Rightarrow (k6_modelc_2 \ X1 \in X0))) \wedge ((\forall X1. \\ & (m2_finseq_1 \ X1 \ k5_numbers) \Rightarrow (\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow \\ & (((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow (k7_modelc_2 \ X1 \ X2 \in X0)))) \wedge ((\forall X1. \\ & (m2_finseq_1 \ X1 \ k5_numbers) \Rightarrow (\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow \\ & (((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow (k8_modelc_2 \ X1 \ X2 \in X0)))) \wedge (\forall X1.(\\ & \neg v1_xboole_0 \ X1) \Rightarrow (((\forall X2.(X2 \in X1) \Rightarrow (m2_finseq_1 \ X2 \ k5_numbers)) \wedge \\ & ((\forall X2.(v7_ordinal1 \ X2) \Rightarrow (k2_modelc_2 \ X2 \in X1)) \wedge ((\forall X2. \\ & (m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow ((X2 \in X1) \Rightarrow (k3_modelc_2 \ X2 \in X1))) \wedge \\ & ((\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow (\forall X3.(m2_finseq_1 \\ & X3 \ k5_numbers) \Rightarrow (((X2 \in X1) \wedge (X3 \in X1)) \Rightarrow (k4_modelc_2 \ X2 \ X3 \in X1)))) \wedge \\ & ((\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow (\forall X3.(m2_finseq_1 \\ & X3 \ k5_numbers) \Rightarrow (((X2 \in X1) \wedge (X3 \in X1)) \Rightarrow (k5_modelc_2 \ X2 \ X3 \in X1)))) \wedge \\ & ((\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow ((X2 \in X1) \Rightarrow (k6_modelc_2 \\ & X2 \in X1))) \wedge ((\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow (\forall X3. \\ & (m2_finseq_1 \ X3 \ k5_numbers) \Rightarrow (((X2 \in X1) \wedge (X3 \in X1)) \Rightarrow (k7_modelc_2 \\ & X2 \ X3 \in X1)))) \wedge (\forall X2.(m2_finseq_1 \ X2 \ k5_numbers) \Rightarrow (\forall X3. \\ & (m2_finseq_1 \ X3 \ k5_numbers) \Rightarrow (((X2 \in X1) \wedge (X3 \in X1)) \Rightarrow (k8_modelc_2 \\ & X2 \ X3 \in X1))))))))) \Rightarrow (r1_tarski \ X0 \ X1))))))))) \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_modelc_2 \ X0) \wedge (m2_finseq_1 \ X0 \ k5_numbers)) \Rightarrow (\\ & \forall X1.((v1_modelc_2 \ X1) \wedge (m2_finseq_1 \ X1 \ k5_numbers)) \Rightarrow (\\ & \forall X2.(m1_subset_1 \ X2 \ (k25_modelc_2 \ k43_modelc_2)) \Rightarrow ((r7_modelc_2 \\ & X2 \ (k3_modelc_2 \ (k5_modelc_2 \ X0 \ X1))) \Leftrightarrow (r7_modelc_2 \ X2 \ (k4_modelc_2 \\ & (k3_modelc_2 \ X0) \ (k3_modelc_2 \ X1)))))) \end{aligned}$$