

t58_modelc_3 (TMPN- HwtCx5SmNK22k9NG4ZBMdgGCzHx28Lk)

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 $v1_modelc_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_modelc_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_orders_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_orders_1 : \iota \Rightarrow \iota$ be given. Let $k1_modelc_3 : \iota \Rightarrow \iota$ be given. Let $v3_modelc_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k24_modelc_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2_modelc_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13_modelc_2 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ \forall X1. ((v1_modelc_3 X1 X0) \wedge (l1_modelc_3 X1 X0)) \Rightarrow ((\neg v3_modelc_3 \\ X1 X0) \Rightarrow ((u2_modelc_3 X0 X1 \neq k1_xboole_0) \wedge (u2_modelc_3 X0 X1 \in k1_orders_1 \\ (k1_modelc_3 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\neg k1_xboole_0 \in k1_orders_1 X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\forall X0. ((v1_modelc_2 X0) \wedge (m1_finseq_1 X0 k5_numbers)) \Rightarrow (\\ k1_modelc_3 X0 = k13_modelc_2 X0) \quad (5)$$

Assume the following.

$$\forall X0. ((v1_modelc_2 X0) \wedge (m1_finseq_1 X0 k5_numbers)) \Rightarrow (\\ \neg v1_xboole_0 (k13_modelc_2 X0)) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_orders_1 X1 X0) \Rightarrow \\ & ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 (k3_tarski X0)) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 (k3_tarski X0))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ & \forall X1.(m1_orders_1 X1 (k1_orders_1 (k1_modelc_3 X0))) \Rightarrow (\\ & \forall X2.((v1_modelc_3 X2 X0) \wedge (l1_modelc_3 X2 X0)) \Rightarrow ((\neg v3_modelc_3 \\ & X2 X0) \Rightarrow (k24_modelc_3 X0 X1 X2 = k1_funct_1 X1 (u2_modelc_3 X0 X2)))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow ((\neg k1_xboole_0 \in X0) \Rightarrow (\forall X1. \\ & ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 X0 (k3_tarski X0)) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 (k3_tarski X0))))))) \Rightarrow ((m1_orders_1 \\ & X1 X0) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (k1_funct_1 X1 X2 \in X2)))) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ & \forall X1.((v1_modelc_3 X1 X0) \wedge (l1_modelc_3 X1 X0)) \Rightarrow (\forall X2. \\ & (m1_orders_1 X2 (k1_orders_1 (k1_modelc_3 X0))) \Rightarrow ((\neg v3_modelc_3 \\ & X1 X0) \Rightarrow (k24_modelc_3 X0 X2 X1 \in u2_modelc_3 X0 X1)))) \end{aligned}$$