

t12_modelc_2

(TMMox9aMoQyRKAbsnw7C7j8PhwqgxZ32x56)

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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 $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_modelc_2 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ 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 $np_2 : \iota$ be given. Let $k6_modelc_2 : \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k7_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_4 : \iota$ be given. Let $k8_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_5 : \iota$ be given. Let $k9_modelc_2 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v8_modelc_2 : \iota \Rightarrow o$ be given. Let $v7_modelc_2 : \iota \Rightarrow o$ be given. Let $v6_modelc_2 : \iota \Rightarrow o$ be given. Let $v5_modelc_2 : \iota \Rightarrow o$ be given. Let $v4_modelc_2 : \iota \Rightarrow o$ be given. Let $v3_modelc_2 : \iota \Rightarrow o$ 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 $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Leftrightarrow (X0 \in k9_modelc_2) \quad (1)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((v8_modelc_2 X0) \Rightarrow (k1_funct_1 X0 np_1 = np_5)) \quad (4)$$

Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((v7_modelc_2 X0) \Rightarrow (k1_funct_1 X0 np_1 = np_4)) \quad (5)$$

Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (v6_modelc_2 X0) \Rightarrow (k1_funct_1 X0 np_1 = np_3) \quad (6)$$

Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (v5_modelc_2 X0) \Rightarrow (k1_funct_1 X0 np_1 = np_2) \quad (7)$$

Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (v4_modelc_2 X0) \Rightarrow (k1_funct_1 X0 np_1 = np_1) \quad (8)$$

Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (v3_modelc_2 X0) \Rightarrow (k1_funct_1 X0 np_1 = k6_numbers) \quad (9)$$

Assume the following.

$$\neg v1_xboole_0 k9_modelc_2 \quad (10)$$

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))))))))) \Rightarrow (11)
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\
& (v8_modelc_2 X0) \Leftrightarrow (\exists X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 \\
& X1 k5_numbers)) \wedge (\exists X2.((v1_modelc_2 X2) \wedge (m2_finseq_1 \\
& X2 k5_numbers)) \wedge (X0 = k8_modelc_2 X1 X2))) \Rightarrow (12)
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\
& (v7_modelc_2 X0) \Leftrightarrow (\exists X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 \\
& X1 k5_numbers)) \wedge (\exists X2.((v1_modelc_2 X2) \wedge (m2_finseq_1 \\
& X2 k5_numbers)) \wedge (X0 = k7_modelc_2 X1 X2))) \Rightarrow (13)
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\
& (v6_modelc_2 X0) \Leftrightarrow (\exists X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 \\
& X1 k5_numbers)) \wedge (X0 = k6_modelc_2 X1)) \Rightarrow (14)
\end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow & \\ (v5_modelc_2 X0) \Leftrightarrow (\exists X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 & \\ X1 k5_numbers)) \wedge (\exists X2.((v1_modelc_2 X2) \wedge (m2_finseq_1 & \\ X2 k5_numbers)) \wedge (X0 = k5_modelc_2 X1 X2)))) & \end{aligned} \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow & \\ (v4_modelc_2 X0) \Leftrightarrow (\exists X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 & \\ X1 k5_numbers)) \wedge (\exists X2.((v1_modelc_2 X2) \wedge (m2_finseq_1 & \\ X2 k5_numbers)) \wedge (X0 = k4_modelc_2 X1 X2)))) & \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow & \\ (v3_modelc_2 X0) \Leftrightarrow (\exists X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 & \\ X1 k5_numbers)) \wedge (X0 = k3_modelc_2 X1)) & \end{aligned} \quad (17)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow & \\ \forall X1.((v1_modelc_2 X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow & \\ (k1_funct_1 (k3_modelc_2 X0) np_1 = k6_numbers) \wedge ((k1_funct_1 & \\ (k4_modelc_2 X0 X1) np_1 = np_1) \wedge ((k1_funct_1 (k5_modelc_2 X0 & \\ X1) np_1 = np_2) \wedge ((k1_funct_1 (k6_modelc_2 X0) np_1 = np_3) \wedge & \\ ((k1_funct_1 (k7_modelc_2 X0 X1) np_1 = np_4) \wedge (k1_funct_1 (k8_modelc_2 & \\ X0 X1) np_1 = np_5)))))) & \end{aligned}$$