

t43_modelc_3

(TMHT5R2BJ2kYyWW6T1otKt7z8bxpnaL4oGu)

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 $k11_modelc_3 : \iota \Rightarrow \iota$ be given. Let $k23_modelc_3 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k22_modelc_3 : \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_modelc_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_modelc_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_modelc_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (1)$$

Assume the following.

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

Assume the following.

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

Assume the following.

$$\forall X0. ((v1_modelc_2 X0) \wedge (m1_finseq_1 X0 k5_numbers)) \Rightarrow ((\neg v1_xboole_0 (k22_modelc_3 X0)) \wedge (v1_finset_1 (k22_modelc_3 X0))) \quad (4)$$

Assume the following.

$$\forall X0. ((v1_modelc_2 X0) \wedge (m1_finseq_1 X0 k5_numbers)) \Rightarrow ((v1_modelc_3 (k11_modelc_3 X0) X0) \wedge ((v3_modelc_3 (k11_modelc_3 X0) X0) \wedge (l1_modelc_3 (k11_modelc_3 X0) X0))) \quad (5)$$

Assume the following.

$$\forall X0. ((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (k23_modelc_3 X0 = \text{ReplSep } (\text{toset } (\lambda X1 : \iota. m1_subset_1 X1 (k22_modelc_3 X0))) (\lambda X1 : \iota. (v1_modelc_3 X1 X0) \wedge ((v3_modelc_3 X1 X0) \wedge (l1_modelc_3 X1 X0))) (\lambda X1 : \iota. X1)) \quad (6)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\
& \quad \forall X1.(\neg v1_xboole_0 X1) \Rightarrow ((X1 = k22_modelc_3 X0) \Leftrightarrow (\forall X2. \\
& (X2 \in X1) \Leftrightarrow (\exists X3.((v1_modelc_3 X3 X0) \wedge (l1_modelc_3 X3 X0)) \wedge \\
& \quad (X2 = X3)))))) \tag{7}
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\
& \quad m1_subset_1 (k11_modelc_3 X0) (k23_modelc_3 X0))
\end{aligned}$$