

l153_modelc.3 (TM- NCM19d7B6xXabSYa7XppmUJ44aqWPiCpR)

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Let $v1_modelc.2 : \iota \Rightarrow o$ be given. Let $v5_modelc.3 : \iota \Rightarrow o$ be given. Let $m2_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k48_modelc.2 : \iota \Rightarrow \iota$ be given. Let $k13_modelc.3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_modelc.3 : \iota \Rightarrow \iota$ be given. Let $k1_xboole.0 : \iota$ be given. Let $v1_xboole.0 : \iota \Rightarrow o$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $r1_xboole.0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np.0 : \iota$ be given. Let $k9_modelc.2 : \iota$ be given. Let $k6_modelc.2 : \iota \Rightarrow \iota$ be given. Let $k1_modelc.3 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole.0 X0) \Rightarrow (X0 = k1_xboole.0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1_subset.1 X1 (k1_zfmisc.1 X2)) \wedge (v1_xboole.0 X2)) \quad (2)$$

Assume the following.

$$\forall X0.(\neg v1_xboole.0 X0) \Rightarrow (\exists X1.(X1 \in X0) \wedge (\forall X2.\forall X3.\forall X4.((X2 \in X3) \wedge ((X3 \in X4) \wedge (X4 \in X1)))) \Rightarrow (r1_xboole.0 X2 X0)) \quad (3)$$

Assume the following.

$$\forall X0.m1_subset.1 k1_xboole.0 (k1_zfmisc.1 X0) \quad (4)$$

Assume the following.

$$v1_xboole.0 np.0 \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset.1 X0 (k1_zfmisc.1 k9_modelc.2)) \Rightarrow (k48_modelc.2 \\ X0 = \text{ReplSep} (\text{toset} (\lambda X1 : \iota.(v1_modelc.2 X1) \wedge (m2_finseq.1 \\ X1 k5_numbers))) (\lambda X1 : \iota.\exists X2.((v1_modelc.2 X2) \wedge (\\ m2_finseq.1 X2 k5_numbers)) \wedge ((X2 \in X0) \wedge (X1 = k6_modelc.2 X2))) \\ (\lambda X1 : \iota.X1)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ \forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_modelc_3 X0))) \Rightarrow (\\ k13_modelc_3 X0 X1 = X1)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.((v1_modelc_2 X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\\ k7_modelc_3 X0 = k1_xboole_0) \quad (8)$$

Theorem 1

$$\forall X0.((v1_modelc_2 X0) \wedge ((v5_modelc_3 X0) \wedge (m2_finseq_1 \\ X0 k5_numbers))) \Rightarrow (k48_modelc_2 (k13_modelc_3 X0 (k7_modelc_3 \\ X0)) = k1_xboole_0)$$