

t44_modelc.3

(TMXc9bmkc7VWzyLuKH9999TG3amVhASW1p9)

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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 $v1_modelc.3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_modelc.3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_modelc.3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k23_modelc.3 : \iota \Rightarrow \iota$ be given. Let $m1_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole.0 : \iota \Rightarrow o$ be given. Let $k22_modelc.3 : \iota \Rightarrow \iota$ 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.

$$\forall X0. ((v1_modelc.2 X0) \wedge (m1_finseq.1 X0 k5_numbers)) \Rightarrow (\neg v1_xboole.0 (k22_modelc.3 X0)) \quad (3)$$

Assume the following.

$$\forall X0. ((v1_modelc.2 X0) \wedge (m2_finseq.1 X0 k5_numbers)) \Rightarrow (k23_modelc.3 X0 = \text{ReplSep} (\text{toset} (\lambda X1 : \iota. m1_subset.1 X1 (k22_modelc.3 X0))) (\lambda X1 : \iota. (v1_modelc.3 X1 X0) \wedge ((v3_modelc.3 X1 X0) \wedge (l1_modelc.3 X1 X0)))) (\lambda X1 : \iota. X1)) \quad (4)$$

Assume the following.

$$\forall X0. ((v1_modelc.2 X0) \wedge (m2_finseq.1 X0 k5_numbers)) \Rightarrow (\forall X1. (\neg v1_xboole.0 X1) \Rightarrow ((X1 = k22_modelc.3 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. ((v1_modelc.3 X3 X0) \wedge (l1_modelc.3 X3 X0)) \wedge (X2 = X3)))))) \quad (5)$$

Theorem 1

$$\forall X0. ((v1_modelc.2 X0) \wedge (m2_finseq.1 X0 k5_numbers)) \Rightarrow (\forall X1. ((v1_modelc.3 X1 X0) \wedge ((v3_modelc.3 X1 X0) \wedge (l1_modelc.3 X1 X0))) \Rightarrow (m1_subset.1 X1 (k23_modelc.3 X0)))$$