

t13_fomodel1

(TMWbPm3A4WBLBJcUPCTmJ9BWQ8SrXdCibW)

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Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v11_fomodel1 : \iota \Rightarrow o$ be given. Let $l1_fomodel1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k15_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_finseq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v6_struct_0 X1) \wedge ((v11_fomodel1 X1) \wedge \\ & (l1_fomodel1 X1))) \Rightarrow ((m2_subset_1 X0 (k3_finseq_2 (k15_fomodel1 \\ & X1)) (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X1)) (k1_tarski \\ & k1_xboole_0))) \Leftrightarrow ((\neg v1_xboole_0 X0) \wedge (m2_finseq_2 X0 (k15_fomodel1 \\ & X1) (k3_finseq_2 (k15_fomodel1 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_2 X1 X0) \Rightarrow (\forall X2. (m2_finseq_2 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (4)$$

Assume the following.

$$\forall X0. k3_finseq_2 X0 = k13_finseq_1 X0 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_2 X1 X0) \Rightarrow (\forall X2. (m2_finseq_2 X2 X0 X1) \Rightarrow (m2_finseq_1 X2 X0)) \quad (6)$$

Assume the following.

$$\forall X0.m1_finseq_2 (k3_finseq_2 X0) X0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k13_finseq_1 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (m2_finseq_1 X2 X0)) \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((\neg v6_struct_0 X1) \wedge ((v11_fomodel1 X1) \wedge \\ & (l1_fomodel1 X1))) \Rightarrow ((m2_subset_1 X0 (k3_finseq_2 (k15_fomodel1 \\ & X1)) (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X1)) (k1_tarski \\ & k1_xboole_0))) \Leftrightarrow ((\neg v1_xboole_0 X0) \wedge (m2_finseq_1 X0 (k15_fomodel1 \\ & X1)))) \end{aligned}$$