

l119_fomodel0 (TMWR- WKmk3YtwyyCjJ1zgKwcQpyziELShprx)

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Let $v4_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v5_finset_1 : \iota \Rightarrow o$ be given. Let $k21_fomodel0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow \iota. \forall X1. \forall X2. (v1_finset_1 X2) \Rightarrow (\\ & v1_finset_1 (ReplSep (toset (\lambda X3 : \iota. m1_subset_1 X3 X1)) (\\ & \lambda X3 : \iota. X3 \in X2) (\lambda X3 : \iota. X0 X3))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. ((v1_finset_1 X0) \wedge (v5_finset_1 X0)) \Rightarrow (v1_finset_1 (k3_tarski X0)) \quad (2)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v1_finset_1 X0)) \Rightarrow (v1_finset_1 (k10_xtuple_0 X0)) \quad (3)$$

Assume the following.

$$\forall X0. (v5_finset_1 X0) \Leftrightarrow (\forall X1. (X1 \in X0) \Rightarrow (v1_finset_1 X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v4_funct_1 X0) \Rightarrow (k21_fomodel0 X0 = k3_tarski (ReplSep \\ & (toset (\lambda X1 : \iota. m1_subset_1 X1 (k2_xboole_0 X0 (k1_tarski \\ & k1_xboole_0)))) (\lambda X1 : \iota. X1 \in X0) (\lambda X1 : \iota. k10_xtuple_0 \\ & X1))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. (v4_funct_1 X0) \Leftrightarrow (\forall X1. (X1 \in X0) \Rightarrow ((v1_relat_1 X1) \wedge (v1_funct_1 X1))) \quad (6)$$

Theorem 1

$$\forall X0. (v4_funct_1 X0) \Rightarrow (((v1_finset_1 X0) \wedge (v5_finset_1 X0)) \Rightarrow (v1_finset_1 (k21_fomodel0 X0)))$$