

t19_necklace (TMcVo- QLTWg219ZW8Yzp5rxR9pyGdbi4UApG)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $k4_necklace : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow & (u1_orders_2 (k4_necklace X0) = k2_xboole_0 \\ & (ReplSep (toset (\lambda X1 : \iota. m1_subset_1 X1 k5_numbers)) (\lambda X1 : \\ & \iota. \neg r1_xxreal_0 X0 (k2_nat_1 X1 np_1)) (\lambda X1 : \iota. k4_tarski \\ & X1 (k2_nat_1 X1 np_1))) (ReplSep (toset (\lambda X1 : \iota. m1_subset_1 \\ & X1 k5_numbers)) (\lambda X1 : \iota. \neg r1_xxreal_0 X0 (k2_nat_1 X1 np_1)) \\ & (\lambda X1 : \iota. k4_tarski (k2_nat_1 X1 np_1) X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (X2 = k2_xboole_0 X0 X1) \Leftrightarrow & (\forall X3. \\ & (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow & (\forall X1. (X1 \in u1_orders_2 (k4_necklace \\ & X0)) \Leftrightarrow (\exists X2. (m1_subset_1 X2 k5_numbers) \wedge ((\neg r1_xxreal_0 \\ & X0 (k2_nat_1 X2 np_1)) \wedge ((X1 = k4_tarski X2 (k2_nat_1 X2 np_1)) \vee \\ & (X1 = k4_tarski (k2_nat_1 X2 np_1) X2)))))) \end{aligned}$$