

t25_necklace
(TMQ12Didd5PagZ6UajWFLNmfXLVPzZy8Spc)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_necklace : \iota \Rightarrow \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg (X1 \in u1_struct_0 (k4_necklace X0)) \wedge (r1_xxreal_0 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\neg r1_xxreal_0 X0 (k1_nat_1 X1 np_1)) \Rightarrow (k4_tarski X1 (k1_nat_1 X1 np_1) \in u1_orders_2 (k4_necklace X0)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4_tarski X0 X1 = k4_tarski X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(X1 \in u1_orders_2 (k4_necklace X0)) \Leftrightarrow (\exists X2.(m1_subset_1 X2 k5_numbers) \wedge ((\neg r1_xxreal_0 X0 (k2_nat_1 X2 np_1)) \wedge ((X1 = k4_tarski X2 (k2_nat_1 X2 np_1)) \vee (X1 = k4_tarski (k2_nat_1 X2 np_1) X2)))))) \quad (4)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow (((X1 \in u1_struct_0 (k4_necklace X0)) \wedge (X2 \in u1_struct_0 (k4_necklace X0))) \Rightarrow (((X1 \neq k1_nat_1 X2 np_1) \wedge (X2 \neq k1_nat_1 X1 np_1)) \vee (k4_tarski X1 X2 \in u1_orders_2 (k4_necklace X0))))))$$