

t11_necklace
(TMRvc526MjFpbVkttdDPzyc5FkPtr9y5x8a)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1_xxreal_0\ X1\ X0))) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0\ X0) \Rightarrow (\forall X1.(v1_xxreal_0\ X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0\ X2) \Rightarrow (((r1_xxreal_0\ X0\ X1) \wedge (r1_xxreal_0\ X1\ X2)) \Rightarrow \\ & (r1_xxreal_0\ X0\ X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (v1_xxreal_0\ X0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (\neg X1 \in X0) \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1\ X2) \Rightarrow ((X1 \in X2) \Rightarrow ((r1_xxreal_0\ X1\ X0) \vee (X0 \in X2)))) \end{aligned}$$