

t24\_necklace  
(TMNexeLEbkSnT54FqPegaXjafqXTfxqVM1h)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  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  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (2)$$

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.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. (v7\_ordinal1 X0) \Rightarrow & (u1\_orders\_2 (k4\_necklace X0) = k2\_xboole\_0 \\ & (ReplSep (toset (\lambda X1 : \iota. m1\_subset\_1 X1 k5\_numbers)) (\lambda X1 : \\ & \iota. \neg r1\_xxreal\_0 X0 (k2\_nat\_1 X1 np\_1)) (\lambda X1 : \iota. k4\_tarski \\ & X1 (k2\_nat\_1 X1 np\_1))) (ReplSep (toset (\lambda X1 : \iota. m1\_subset\_1 \\ & X1 k5\_numbers)) (\lambda X1 : \iota. \neg r1\_xxreal\_0 X0 (k2\_nat\_1 X1 np\_1)) \\ & (\lambda X1 : \iota. k4\_tarski (k2\_nat\_1 X1 np\_1) X1))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 \ np\_1) \wedge (m2\_subset\_1 \ np\_1 \ k1\_numbers \ k5\_numbers)) \wedge \\ & ((m1\_subset\_1 \ np\_1 \ k5\_numbers) \wedge (m1\_subset\_1 \ np\_1 \ k1\_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. ((m1\_subset\_1 \ X0 \ k5\_numbers) \wedge (v7\_ordinal1 \ X1)) \Rightarrow (k2\_nat\_1 \ X0 \ X1 = k2\_xcmplx\_0 \ X0 \ X1) \quad (8)$$

Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 \ X0) \wedge (m1\_subset\_1 \ X1 \ k5\_numbers)) \Rightarrow (k1\_nat\_1 \ X0 \ X1 = k2\_xcmplx\_0 \ X0 \ X1) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. k4\_tarski \ X0 \ X1 = k2\_tarski \ (k2\_tarski \ X0 \ X1) \ (k1\_tarski \ X0) \quad (10)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2\_xboole\_0 \ X0 \ X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \quad (11)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \ X0 \ k4\_ordinal1) \Rightarrow (v7\_ordinal1 \ X0) \quad (12)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (v7\_ordinal1 \ X0) \Rightarrow (\forall X1. (v7\_ordinal1 \ X1) \Rightarrow (\forall X2. \\ & (v7\_ordinal1 \ X2) \Rightarrow (\neg (k4\_tarski \ X1 \ X2 \in u1\_orders\_2 \ (k4\_necklace \\ & \ X0)) \wedge ((X1 \neq k1\_nat\_1 \ X2 \ np\_1) \wedge (X2 \neq k1\_nat\_1 \ X1 \ np\_1)))))) \end{aligned}$$