

t2\_necklace  
(TMZrXeLaRxitsnYaR2dFKo4sHm92PUu6ZEG)

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Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.k3\_enumset1 \\ X0\ X1\ X2\ X3\ X4 = & k2\_xboole\_0 (k1\_enumset1\ X0\ X1\ X2) (k2\_tarski\ X3\ X4) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.k2\_zfmisc\_1 (k2\_xboole\_0 \\ X0\ X1) (k2\_xboole\_0\ X2\ X3) = & k2\_xboole\_0 (k2\_xboole\_0 (k2\_xboole\_0 \\ (k2\_zfmisc\_1\ X0\ X2) (k2\_zfmisc\_1\ X0\ X3)) & (k2\_zfmisc\_1\ X1\ X2)) (k2\_zfmisc\_1 \\ X1\ X3) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \forall X6.\forall X7.\forall X8.k7\_enumset1\ X0\ X1\ X2\ X3\ X4\ X5\ X6 \\ X7\ X8 = & k2\_xboole\_0 (k3\_enumset1\ X0\ X1\ X2\ X3\ X4) (k2\_enumset1\ X5\ X6 \\ & X7\ X8) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \forall X6.\forall X7.\forall X8.k7\_enumset1\ X0\ X1\ X2\ X3\ X4\ X5\ X6 \\ X7\ X8 = & k2\_xboole\_0 (k2\_enumset1\ X0\ X1\ X2\ X3) (k3\_enumset1\ X4\ X5\ X6 \\ & X7\ X8) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.k2\_enumset1\ X0\ X1 \\ X2\ X3 = & k2\_xboole\_0 (k2\_tarski\ X0\ X1) (k2\_tarski\ X2\ X3) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k1\_enumset1\ X0\ X1\ X2 = k1\_enumset1\ X1\ X2\ X0 \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(k2\_zfmisc\_1\ (k1\_tarski\ X0) \\ & (k2\_tarski\ X1\ X2) = k2\_tarski\ (k4\_tarski\ X0\ X1)\ (k4\_tarski\ X0\ X2)) \wedge \\ & (k2\_zfmisc\_1\ (k2\_tarski\ X0\ X1)\ (k1\_tarski\ X2) = k2\_tarski\ (k4\_tarski \\ & X0\ X2)\ (k4\_tarski\ X1\ X2)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k1\_enumset1\ X0\ X1\ X2 = k2\_xboole\_0\ (k1\_tarski\ X0)\ (k2\_tarski\ X1\ X2) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.k2\_zfmisc\_1\ (k1\_tarski\ X0)\ (k1\_tarski\ X1) = k1\_tarski\ (k4\_tarski\ X0\ X1) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(k2\_zfmisc\_1\ (k2\_tarski\ X0\ X1) \\ & X2 = k2\_xboole\_0\ (k2\_zfmisc\_1\ (k1\_tarski\ X0)\ X2)\ (k2\_zfmisc\_1\ ( \\ & k1\_tarski\ X1)\ X2)) \wedge (k2\_zfmisc\_1\ X2\ (k2\_tarski\ X0\ X1) = k2\_xboole\_0 \\ & (k2\_zfmisc\_1\ X2\ (k1\_tarski\ X0))\ (k2\_zfmisc\_1\ X2\ (k1\_tarski\ X1))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0 \quad (11)$$

### Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & k2\_zfmisc\_1\ (k1\_enumset1\ X0\ X1\ X2)\ (k1\_enumset1\ X3\ X4\ X5) = k7\_enumset1 \\ & (k4\_tarski\ X0\ X3)\ (k4\_tarski\ X0\ X4)\ (k4\_tarski\ X0\ X5)\ (k4\_tarski \\ & X1\ X3)\ (k4\_tarski\ X1\ X4)\ (k4\_tarski\ X1\ X5)\ (k4\_tarski\ X2\ X3)\ (k4\_tarski \\ & X2\ X4)\ (k4\_tarski\ X2\ X5) \end{aligned}$$