

t20\_enumset1  
(TMNJAKw27w47zi7qt74uyxVWWha5oqJEZEf9)

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Let  $k5\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.k2\_xboole\_0 (k2\_xboole\_0 X0 X1) X2 = k2\_xboole\_0 X0 (k2\_xboole\_0 X1 X2) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \forall X6.k5\_enumset1 X0 X1 X2 X3 X4 X5 X6 = k2\_xboole\_0 (k1\_enumset1 \\ & \quad X0 X1 X2) (k2\_enumset1 X3 X4 X5 X6) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.k3\_enumset1 \\ & X0 X1 X2 X3 X4 = k2\_xboole\_0 (k1\_enumset1 X0 X1 X2) (k2\_tarski X3 X4) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.k2\_enumset1 X0 X1 \\ & X2 X3 = k2\_xboole\_0 (k2\_tarski X0 X1) (k2\_tarski X2 X3) \end{aligned} \quad (4)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \forall X6.k5\_enumset1 X0 X1 X2 X3 X4 X5 X6 = k2\_xboole\_0 (k3\_enumset1 \\ & \quad X0 X1 X2 X3 X4) (k2\_tarski X5 X6) \end{aligned}$$