

t80\_gfacirc1  
(TMGKwe7JBYsPiHoFtY8W9ctJsjtS6aFsYoC)

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Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_twoscomp : \iota$  be given. Let  $k3\_msafree2 : \iota \Rightarrow \iota$  be given. Let  $k31\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_gfacirc1 : \iota$  be given. Let  $k4\_twoscomp : \iota$  be given. Let  $k33\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. k3\_msafree2 (k31\_gfacirc1 X0 \\ & X1 X2) = k2\_xboole\_0 (k1\_enumset1 (k4\_tarski (k10\_finseq\_1 X0 X1) \\ & k3\_twoscomp) (k4\_tarski (k10\_finseq\_1 X1 X2) k3\_gfacirc1) (k4\_tarski \\ & (k10\_finseq\_1 X2 X0) k4\_twoscomp)) (k1\_tarski (k33\_gfacirc1 X0 \\ & X1 X2)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. k2\_enumset1 X0 X1 \\ & X2 X3 = k2\_xboole\_0 (k1\_enumset1 X0 X1 X2) (k1\_tarski X3) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. (X4 = k2\_enumset1 \\ & X0 X1 X2 X3) \Leftrightarrow (\forall X5. (X5 \in X4) \Leftrightarrow (\neg (X5 \neq X0) \wedge ((X5 \neq X1) \wedge ((X5 \neq X2) \wedge \\ & (X5 \neq X3)))))) \end{aligned} \tag{3}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (k4\_tarski (k10\_finseq\_1 X0 \\ & X1) k3\_twoscomp \in k3\_msafree2 (k31\_gfacirc1 X0 X1 X2)) \wedge ((k4\_tarski \\ & (k10\_finseq\_1 X1 X2) k3\_gfacirc1 \in k3\_msafree2 (k31\_gfacirc1 X0 \\ & X1 X2)) \wedge ((k4\_tarski (k10\_finseq\_1 X2 X0) k4\_twoscomp \in k3\_msafree2 \\ & (k31\_gfacirc1 X0 X1 X2)) \wedge (k33\_gfacirc1 X0 X1 X2 \in k3\_msafree2 (k31\_gfacirc1 \\ & X0 X1 X2)))) \end{aligned}$$