

## t26\_gfacirc1

(TMR1JbYFpwj m84ow6YwuAPxTY81yyYFpKWb)

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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  $k14\_twoscomp : \iota$  be given. Let  $k3\_msafree2 : \iota \Rightarrow \iota$  be given. Let  $k10\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k12\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k9\_facirc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. k3\_msafree2 (k10\_gfacirc1 X0 \\ X1 X2) = k2\_xboole\_0 (k1\_tarski (k4\_tarski (k10\_finseq\_1 X0 X1) \\ & k14\_twoscomp)) (k1\_tarski (k12\_gfacirc1 X0 X1 X2)) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (X1 = k1\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow \\ & (X2 = X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. k12\_gfacirc1 X0 X1 X2 = k9\_facirc\_1 \\ & X0 X1 X2 k14\_twoscomp \end{aligned} \quad (4)$$

### Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (k4\_tarski (k10\_finseq\_1 X0 \\ X1) k14\_twoscomp \in k3\_msafree2 (k10\_gfacirc1 X0 X1 X2)) \wedge (k12\_gfacirc1 \\ & X0 X1 X2 \in k3\_msafree2 (k10\_gfacirc1 X0 X1 X2)) \end{aligned}$$