

t48_gfacirc1 (TMPpYTtmzuePdWKJXdxaMsN1CMiwuppfB8K)

October 27, 2020

Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_gfacirc1 : \iota$ be given. Let $k3_msafree2 : \iota \Rightarrow \iota$ be given. Let $k19_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_twoscomp : \iota$ be given. Let $k2_twoscomp : \iota$ be given. Let $k21_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k2_enumset1\ X0\ X1\ X2\ X3 = k2_xboole_0\ (k1_enumset1\ X0\ X1\ X2)\ (k1_tarski\ X3) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3_msafree2\ (k19_gfacirc1\ X0\ X1\ X2) = k2_xboole_0\ (k1_enumset1\ (k4_tarski\ (k10_finseq_1\ X0\ X1)\ k3_gfacirc1)\ (k4_tarski\ (k10_finseq_1\ X1\ X2)\ k3_twoscomp)\ (k4_tarski\ (k10_finseq_1\ X2\ X0)\ k2_twoscomp))\ (k1_tarski\ (k21_gfacirc1\ X0\ X1\ X2)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(X4 = k2_enumset1\ X0\ X1\ X2\ X3) \Leftrightarrow (\forall X5.(X5 \in X4) \Leftrightarrow (\neg(X5 \neq X0) \wedge ((X5 \neq X1) \wedge ((X5 \neq X2) \wedge (X5 \neq X3)))))) \quad (3)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(k4_tarski\ (k10_finseq_1\ X0\ X1)\ k3_gfacirc1 \in k3_msafree2\ (k19_gfacirc1\ X0\ X1\ X2)) \wedge ((k4_tarski\ (k10_finseq_1\ X1\ X2)\ k3_twoscomp \in k3_msafree2\ (k19_gfacirc1\ X0\ X1\ X2)) \wedge ((k4_tarski\ (k10_finseq_1\ X2\ X0)\ k2_twoscomp \in k3_msafree2\ (k19_gfacirc1\ X0\ X1\ X2)) \wedge (k21_gfacirc1\ X0\ X1\ X2 \in k3_msafree2\ (k19_gfacirc1\ X0\ X1\ X2))))$$