

t129_gfacirc1 (TMM- PdHwAtwfn8GCypCUywez4PYqtg3TmNu4)

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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 $k4_twoscomp : \iota$ be given. Let $k2_msafree2 : \iota \Rightarrow \iota$ be given. Let $k49_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k6_margrel1 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_facirc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_circcomb : \iota \Rightarrow o$ be given. Let $v2_circcomb : \iota \Rightarrow o$ be given. Let $l1_msualg_1 : \iota \Rightarrow o$ be given. Let $r1_circcomb : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_circcomb : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k43_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k46_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v11_struct_0 : \iota \Rightarrow o$ be given. Let $v1_msualg_1 : \iota \Rightarrow o$ be given. Let $v3_circcomb : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X3) \wedge \\ & ((v1_funct_2 X3 (k4_finseq_2 np_2 k6_margrel1) k6_margrel1) \wedge \\ & (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 (k4_finseq_2 np_2 \\ & k6_margrel1) k6_margrel1)))))) \Rightarrow ((X0 \neq k4_tarski (k10_finseq_1 \\ & X1 X2) X3) \Rightarrow (k2_msafree2 (k8_facirc_1 X1 X2 X0 X3) = k1_enumset1 X1 \\ & X2 X0)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v1_circcomb X0) \wedge ((v2_circcomb \\ & X0) \wedge (l1_msualg_1 X0)))) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge ((v1_circcomb \\ & X1) \wedge ((v2_circcomb X1) \wedge (l1_msualg_1 X1)))) \Rightarrow (r1_circcomb X0 X1)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_msualg_1 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge (l1_msualg_1 X1)) \Rightarrow (((r1_circcomb X0 X1) \wedge \\ & (k2_msafree2 X0 = k2_msafree2 X1)) \Rightarrow (k2_msafree2 (k2_circcomb \\ & X0 X1) = k2_msafree2 X0))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\neg(X0\neq k4_tarski (k10_finseq_1 \\ & X1 X2) k4_twoscomp)\wedge((X1\neq k4_tarski (k10_finseq_1 X2 X0) k4_twoscomp)\wedge \\ & ((X2\neq k4_tarski (k10_finseq_1 X0 X1) k4_twoscomp)\wedge(k2_msafree2 \\ & (k43_gfacirc1 X0 X1 X2)\neq k1_enumset1 X0 X1 X2))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(\neg v2_struct_0 (k46_gfacirc1 \\ & X0 X1 X2))\wedge((\neg v11_struct_0 (k46_gfacirc1 X0 X1 X2))\wedge((v1_msualg_1 \\ & (k46_gfacirc1 X0 X1 X2))\wedge((v1_circcomb (k46_gfacirc1 X0 X1 X2))\wedge \\ & ((v2_circcomb (k46_gfacirc1 X0 X1 X2))\wedge((v3_circcomb (k46_gfacirc1 \\ & X0 X1 X2))\wedge(l1_msualg_1 (k46_gfacirc1 X0 X1 X2))))))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(\neg v2_struct_0 (k43_gfacirc1 \\ & X0 X1 X2))\wedge((\neg v11_struct_0 (k43_gfacirc1 X0 X1 X2))\wedge((v1_msualg_1 \\ & (k43_gfacirc1 X0 X1 X2))\wedge((v1_circcomb (k43_gfacirc1 X0 X1 X2))\wedge \\ & ((v2_circcomb (k43_gfacirc1 X0 X1 X2))\wedge((v3_circcomb (k43_gfacirc1 \\ & X0 X1 X2))\wedge(l1_msualg_1 (k43_gfacirc1 X0 X1 X2))))))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & (v1_funct_1 k14_twoscomp)\wedge((v1_funct_2 k14_twoscomp (k4_finseq_2 \\ & np_2 k6_margrel1) k6_margrel1)\wedge(m1_subset_1 k14_twoscomp (\\ & k1_zfmisc_1 (k2_zfmisc_1 (k4_finseq_2 np_2 k6_margrel1) k6_margrel1)))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.k49_gfacirc1 X0 X1 X2 = k2_circcomb \\ & (k46_gfacirc1 X0 X1 X2) (k43_gfacirc1 X0 X1 X2) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.k46_gfacirc1 X0 X1 X2 = k8_facirc1 \\ & X0 X1 X2 k14_twoscomp \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\neg(X2\neq k4_tarski (k10_finseq_1 \\ & X0 X1) k14_twoscomp)\wedge((X0\neq k4_tarski (k10_finseq_1 X1 X2) k4_twoscomp)\wedge \\ & ((X1\neq k4_tarski (k10_finseq_1 X2 X0) k4_twoscomp)\wedge((X2\neq k4_tarski \\ & (k10_finseq_1 X0 X1) k4_twoscomp)\wedge(k2_msafree2 (k49_gfacirc1 \\ & X0 X1 X2)\neq k1_enumset1 X0 X1 X2)))) \end{aligned}$$