

t120_gfacirc1
(TMJYnYFEcGa8Z1CFXYzciA6wZnnrvn1KTtA)

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Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k46_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. 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 $v1_funct_1 : \iota \Rightarrow o$ 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. Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1_funct_1 X3) \wedge \\ & ((v1_funct_2 X3 (k4_finseq_2 np_2 k6_margrel1) k6_margrel1) \wedge \\ & (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 (k4_finseq_2 np_2 \\ & k6_margrel1) k6_margrel1)))))) \Rightarrow ((k4_tarski (k10_finseq_1 X0 \\ & X1) X3 \in u1_struct_0 (k8_facirc_1 X0 X1 X2 X3)) \wedge (k4_tarski (k10_finseq_1 \\ & (k4_tarski (k10_finseq_1 X0 X1) X3) X2) X3 \in u1_struct_0 (k8_facirc_1 \\ & X0 X1 X2 X3))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1_funct_1 X3) \wedge \\ & ((v1_funct_2 X3 (k4_finseq_2 np_2 k6_margrel1) k6_margrel1) \wedge \\ & (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 (k4_finseq_2 np_2 \\ & k6_margrel1) k6_margrel1)))))) \Rightarrow ((X0 \in u1_struct_0 (k8_facirc_1 \\ & X0 X1 X2 X3)) \wedge ((X1 \in u1_struct_0 (k8_facirc_1 X0 X1 X2 X3)) \wedge (X2 \in u1_struct_0 \\ & (k8_facirc_1 X0 X1 X2 X3)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & (v1_funct_1 k14_twoscomp) \wedge ((v1_funct_2 k14_twoscomp (k4_finseq_2 \\ & np_2 k6_margrel1) k6_margrel1) \wedge (m1_subset_1 k14_twoscomp (\\ & k1_zfmisc_1 (k2_zfmisc_1 (k4_finseq_2 np_2 k6_margrel1) k6_margrel1)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.k46_gfacirc1 X0 X1 X2 = k8_facirc_1 \\ & X0 X1 X2 k14_twoscomp \end{aligned} \tag{4}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(X0 \in u1_struct_0 (k46_gfacirc1 X0 X1 X2)) \wedge ((X1 \in u1_struct_0 (k46_gfacirc1 X0 X1 X2)) \wedge ((X2 \in u1_struct_0 (k46_gfacirc1 X0 X1 X2)) \wedge ((k4_tarski (k10_finseq_1 X0 X1) k14_twoscomp \in u1_struct_0 (k46_gfacirc1 X0 X1 X2)) \wedge (k4_tarski (k10_finseq_1 (k4_tarski (k10_finseq_1 X0 X1) k14_twoscomp) X2) k14_twoscomp \in u1_struct_0 (k46_gfacirc1 X0 X1 X2))))))$$