

t133_gfacirc1 (TMRXrrosWdzWHqabBYSh- WqjWRRrh55C4exxK)

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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 $k49_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k48_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_twoscomp : \iota$ be given. Let $k45_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.k3_enumset1 \\ X0\ X1\ X2\ X3\ X4 = & k2_xboole_0 (k2_tarski\ X0\ X1) (k1_enumset1\ X2\ X3\ X4) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski\ X0\ X1 = k2_xboole_0 (k1_tarski\ X0) (k1_tarski\ X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ k4_enumset1\ X0\ X1\ X2\ X3\ X4\ X5 = & k2_xboole_0 (k3_enumset1\ X0\ X1\ X2\ X3 \\ & X4) (k1_tarski\ X5) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.k3_msafree2 (k49_gfacirc1\ X0 \\ X1\ X2) = & k2_xboole_0 (k2_xboole_0 (k2_xboole_0 (k1_tarski (k4_tarski \\ & (k10_finseq_1\ X0\ X1) k14_twoscomp)) (k1_tarski (k48_gfacirc1 \\ X0\ X1\ X2))) (k1_enumset1 (k4_tarski (k10_finseq_1\ X0\ X1) k4_twoscomp) \\ & (k4_tarski (k10_finseq_1\ X1\ X2) k4_twoscomp) (k4_tarski (k10_finseq_1 \\ X2\ X0) k4_twoscomp))) (k1_tarski (k45_gfacirc1\ X0\ X1\ X2)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \forall X6.(X6 = k4.enumset1 X0 X1 X2 X3 X4 X5) \Leftrightarrow (\forall X7.(X7 \in X6) \Leftrightarrow \\ & (\neg(X7 \neq X0) \wedge ((X7 \neq X1) \wedge ((X7 \neq X2) \wedge ((X7 \neq X3) \wedge ((X7 \neq X4) \wedge (X7 \neq X5))))))) \end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(k4.tarski (k10.finseq_1 X0 \\ & X1) k14.twoscomp \in k3.msafree2 (k49.gfacirc1 X0 X1 X2)) \wedge ((k48.gfacirc1 \\ & X0 X1 X2 \in k3.msafree2 (k49.gfacirc1 X0 X1 X2)) \wedge ((k4.tarski (k10.finseq_1 \\ & X0 X1) k4.twoscomp \in k3.msafree2 (k49.gfacirc1 X0 X1 X2)) \wedge ((k4.tarski \\ & (k10.finseq_1 X1 X2) k4.twoscomp \in k3.msafree2 (k49.gfacirc1 X0 \\ & X1 X2)) \wedge ((k4.tarski (k10.finseq_1 X2 X0) k4.twoscomp \in k3.msafree2 \\ & (k49.gfacirc1 X0 X1 X2)) \wedge (k45.gfacirc1 X0 X1 X2 \in k3.msafree2 (k49.gfacirc1 \\ & X0 X1 X2)))))) \end{aligned}$$