

t11_bcialg_3
(TMPNc5LjFWGHjAPY6bShpRnX4RK4JsqgjHM)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_bcialg_1 : \iota \Rightarrow o$ be given. Let $v4_bcialg_1 : \iota \Rightarrow o$ be given. Let $v5_bcialg_1 : \iota \Rightarrow o$ be given. Let $v7_bcialg_1 : \iota \Rightarrow o$ be given. Let $v8_bcialg_1 : \iota \Rightarrow o$ be given. Let $l2_bcialg_1 : \iota \Rightarrow o$ be given. Let $v1_bcialg_3 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_bcialg_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_bcialg_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 X0) \wedge \\
& (l2_bcialg_1 X0)))))) \Rightarrow (((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge \\
& ((v4_bcialg_1 X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 \\
& X0) \wedge ((v1_bcialg_3 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow (\forall X1. \quad (1) \\
& (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow \\
& ((r1_bcialg_1 X0 X2 X3) \Rightarrow (k1_bcialg_1 X0 (k1_bcialg_1 X0 X3 X1) (\\
& k1_bcialg_1 X0 X3 X2) = k1_bcialg_1 X0 X2 X1))))))
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 X0) \wedge \\
& (l2_bcialg_1 X0)))))) \Rightarrow (((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge \\
& ((v4_bcialg_1 X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 \\
& X0) \wedge ((v1_bcialg_3 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow \\
& ((r1_bcialg_1 X0 X1 X3) \Rightarrow (k1_bcialg_1 X0 (k1_bcialg_1 X0 X3 X2) (\\
& k1_bcialg_1 X0 (k1_bcialg_1 X0 X3 X2) (k1_bcialg_1 X0 X3 X1) = k1_bcialg_1 \\
& X0 (k1_bcialg_1 X0 X3 X2) (k1_bcialg_1 X0 X1 X2))))))
\end{aligned}$$