

t51_bcialg_5

(TMZ12FXnnkujNWadyZLPcPzoXv89PS8UjZC)

October 27, 2020

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 $l2_bcialg_1 : \iota \Rightarrow o$ be given. Let $v8_bcialg_1 : \iota \Rightarrow o$ be given. Let $m1_bcialg_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v11_bcialg_3 : \iota \Rightarrow o$ be given. Let $v10_bcialg_3 : \iota \Rightarrow o$ be given. Let $v1_bcialg_3 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\ &X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\ &(((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 X0) \wedge (\\ &v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 X0) \wedge ((v11_bcialg_3 \\ &X0) \wedge (l2_bcialg_1 X0)))))))) \Leftrightarrow ((v8_bcialg_1 X0) \wedge (m1_bcialg_5 \\ &X0 np_1 k6_numbers k6_numbers k6_numbers))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\ &X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\ &(((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 X0) \wedge (\\ &v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 X0) \wedge ((v10_bcialg_3 \\ &X0) \wedge (l2_bcialg_1 X0)))))))) \Leftrightarrow ((v8_bcialg_1 X0) \wedge (m1_bcialg_5 \\ &X0 k6_numbers np_1 k6_numbers np_1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\ &X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\ &(((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 X0) \wedge (\\ &v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 X0) \wedge ((v1_bcialg_3 \\ &X0) \wedge (l2_bcialg_1 X0)))))))) \Leftrightarrow (m1_bcialg_5 X0 k6_numbers k6_numbers \\ &k6_numbers k6_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 X0) \wedge \\
& (l2_bcialg_1 X0)))))) \Rightarrow (((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge \\
& ((v4_bcialg_1 X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 \\
& X0) \wedge ((v11_bcialg_3 X0) \wedge (l2_bcialg_1 X0)))))) \Leftrightarrow (((\neg v2_struct_0 \\
& X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 X0) \wedge ((v5_bcialg_1 X0) \wedge \\
& ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 X0) \wedge ((v1_bcialg_3 X0) \wedge (l2_bcialg_1 \\
& X0)))))) \wedge ((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge ((v8_bcialg_1 X0) \wedge \\
& ((v10_bcialg_3 X0) \wedge (l2_bcialg_1 X0))))))))))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\
& (((v8_bcialg_1 X0) \wedge (m1_bcialg_5 X0 \ np_1 \ k6_numbers \ k6_numbers \\
& \ k6_numbers)) \Leftrightarrow (((v8_bcialg_1 X0) \wedge (m1_bcialg_5 X0 \ k6_numbers \\
& \ k6_numbers \ k6_numbers \ k6_numbers)) \wedge ((v8_bcialg_1 X0) \wedge (m1_bcialg_5 \\
& \ X0 \ k6_numbers \ np_1 \ k6_numbers \ np_1))))
\end{aligned}$$