

t32_msualg_6

(TMbv4PQWP2RSohgXJmz4bMkZMdLFv9yXACT)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v11_struct_0 : \iota \Rightarrow o$ be given. Let $l1_msualg_1 : \iota \Rightarrow o$ be given. Let $v4_msualg_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l3_msualg_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_msualg_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u3_msualg_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_msualg_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_msualg_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_msualg_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge (l1_msualg_1 \\ & X0))) \Rightarrow (\forall X1.((v4_msualg_1 X1 X0) \wedge (l3_msualg_1 X1 X0)) \Rightarrow \\ & (\forall X2.((v4_msualg_6 X2 X0 X1) \wedge (m1_msualg_4 X2 (u1_struct_0 \\ & X0) (u3_msualg_1 X0 X1) (u3_msualg_1 X0 X1))) \Rightarrow (v4_msualg_6 (k6_msualg_6 \\ & X0 X1 X2) X0 X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 \\ & X0) \wedge (l1_msualg_1 X0))) \wedge (((v4_msualg_1 X1 X0) \wedge (l3_msualg_1 X1 \\ & X0) \wedge (m1_msualg_4 X2 (u1_struct_0 X0) (u3_msualg_1 X0 X1) (u3_msualg_1 \\ & X0 X1)))) \Rightarrow ((v4_msualg_6 (k7_msualg_6 X0 X1 X2) X0 X1) \wedge (m1_msualg_4 \\ & (k7_msualg_6 X0 X1 X2) (u1_struct_0 X0) (u3_msualg_1 X0 X1) (u3_msualg_1 \\ & X0 X1)))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge (l1_msualg_1 \\ & X0))) \Rightarrow (\forall X1.((v4_msualg_1 X1 X0) \wedge (l3_msualg_1 X1 X0)) \Rightarrow \\ & (\forall X2.(m1_msualg_4 X2 (u1_struct_0 X0) (u3_msualg_1 X0 X1) \\ & (u3_msualg_1 X0 X1)) \Rightarrow (v4_msualg_6 (k6_msualg_6 X0 X1 (k7_msualg_6 \\ & X0 X1 X2)) X0 X1))) \end{aligned}$$