

t39_robins2

(TMa5SNcGuiPDiMZQinXygxapDModX7pXkZM)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_robins2 : \iota \Rightarrow o$ be given. Let $l2_robins1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_robins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_robins1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Let $l1_robins1 : \iota \Rightarrow o$ be given. Let $v4_lattices : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v1_robins2 X0) \wedge (l2_robins1 \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ (u1_struct_0 X0)) \Rightarrow (k5_robins1 X0 X1 (k3_robins1 X0 (k5_robins1 \\ X0 (k3_robins1 X0 (k5_robins1 X0 X2 X3)) (k3_robins1 X0 (k5_robins1 \\ X0 X2 X1)))) = k5_robins1 X0 X2 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(l2_robins1 X0) \Rightarrow ((l2_lattices X0) \wedge (l1_robins1 X0)) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0) \wedge ((v4_lattices \\ X0) \wedge (l2_robins1 X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (\\ m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (m1_subset_1 (k5_robins1 \\ X0 X1 X2) (u1_struct_0 X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((\neg v2_struct_0 X0) \wedge (l1_robins1 X0)) \wedge \\ (m1_subset_1 X1 (u1_struct_0 X0))) \Rightarrow (m1_subset_1 (k3_robins1 \\ X0 X1) (u1_struct_0 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0) \wedge ((v4_lattices \\ X0) \wedge (l2_robins1 X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (\\ m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (k5_robins1 X0 X1 X2 = k5_robins1 \\ X0 X2 X1) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(l2_robbins1\ X0)\Rightarrow(((\neg v2_struct_0\ X0)\wedge(v1_robbins2\ X0))\Rightarrow((\neg v2_struct_0\ X0)\wedge(v4_lattices\ X0))) \quad (6)$$

Theorem 1

$$\begin{aligned} &\forall X0.((\neg v2_struct_0\ X0)\wedge((v1_robbins2\ X0)\wedge(l2_robbins1\ X0)))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow(\forall X2. \\ &(m1_subset_1\ X2\ (u1_struct_0\ X0))\Rightarrow(\forall X3.(m1_subset_1\ X3\ (u1_struct_0\ X0))\Rightarrow(k5_robbins1\ X0\ X1\ (k3_robbins1\ X0\ (k5_robbins1 \\ &X0\ (k3_robbins1\ X0\ (k5_robbins1\ X0\ X2\ X1))\ (k3_robbins1\ X0\ (k5_robbins1 \\ &X0\ X2\ X3)))) = k5_robbins1\ X0\ X2\ X1)))) \end{aligned}$$