

t5_robins2 (TMdqWTibYKxaDejQhSyeB- SLWqWXGMXVuBRj)

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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 $k3_robins1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Let $l1_robins1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v1_robins2 X0) \wedge (l2_robins1 \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & (k3_robins1 X0 (k1_lattices X0 (k3_robins1 X0 (k1_lattices X0 \\ & X1 X2)) (k3_robins1 X0 (k1_lattices X0 (k3_robins1 X0 (k1_lattices \\ & X0 X3 X1)) (k3_robins1 X0 (k1_lattices X0 (k3_robins1 X0 (k1_lattices \\ & X0 (k3_robins1 X0 (k1_lattices X0 X2 (k3_robins1 X0 X2))) X2)) \\ & (k3_robins1 X0 (k1_lattices X0 X2 X4)))))) = X2)))))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (l1_robins1 X0)) \wedge \\ & (m1_subset_1 X1 (u1_struct_0 X0))) \Rightarrow (m1_subset_1 (k3_robins1 \\ & X0 X1) (u1_struct_0 X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge (l2_lattices \\ & X0)) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (m1_subset_1 X2 (u1_struct_0 \\ & X0)))) \Rightarrow (m1_subset_1 (k1_lattices X0 X1 X2) (u1_struct_0 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l2_robbins1 X0)) \Rightarrow ((v1_robbins2 \\
& \quad X0) \Leftrightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& \quad (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& \quad (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
& \quad (k3_robbins1 X0 (k1_lattices X0 (k3_robbins1 X0 (k1_lattices X0 \\
& \quad (k3_robbins1 X0 (k1_lattices X0 X1 X2)) X3)) (k3_robbins1 X0 (k1_lattices \\
& \quad X0 X1 (k3_robbins1 X0 (k1_lattices X0 (k3_robbins1 X0 X3) (k3_robbins1 \\
& \quad X0 (k1_lattices X0 X3 X4)))))) = X3)))))) \\
& \hspace{20em} (5)
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v1_robbins2 X0) \wedge (l2_robbins1 \\
& \quad X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& \quad (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& \quad (u1_struct_0 X0)) \Rightarrow (k3_robbins1 X0 (k1_lattices X0 (k3_robbins1 \\
& \quad X0 (k1_lattices X0 X1 X2)) (k3_robbins1 X0 (k1_lattices X0 (k3_robbins1 \\
& \quad X0 (k1_lattices X0 X3 X1)) X2))) = X2)))
\end{aligned}$$