

t39\_robbins1 (TMZK-  
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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v4\_lattices : \iota \Rightarrow o$  be given. Let  $v5\_lattices : \iota \Rightarrow o$  be given. Let  $l2\_robbins1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k9\_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l2\_robbins1 X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (k11\_robbins1 X0 X1 = k3\_robbins1 \\ & X0 (k1\_lattices X0 (k3\_robbins1 X0 X1) X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l2\_robbins1 X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. (m1\_subset\_1 X2 \\ & (u1\_struct\_0 X0)) \Rightarrow (k9\_robbins1 X0 X1 X2 = k3\_robbins1 X0 (k1\_lattices \\ & X0 (k3\_robbins1 X0 X1) X2)))) \end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v4\_lattices X0) \wedge ((v5\_lattices \\ & X0) \wedge ((v5\_robbins1 X0) \wedge (l2\_robbins1 X0)))))) \Rightarrow (\forall X1. (m1\_subset\_1 \\ & X1 (u1\_struct\_0 X0)) \Rightarrow (k9\_robbins1 X0 X1 X1 = k11\_robbins1 X0 X1)) \end{aligned}$$