

# t21\_robins2

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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.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v1\_robins2 X0) \wedge (l2\_robins1 \\ & \quad X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & \quad (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (k3\_robins1 X0 (k1\_lattices \\ & \quad X0 X1 (k3\_robins1 X0 (k1\_lattices X0 X2 (k3\_robins1 X0 X1)))) = \\ & \quad k3\_robins1 X0 X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v1\_robins2 X0) \wedge (l2\_robins1 \\ & \quad X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & \quad (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (k3\_robins1 X0 (k1\_lattices \\ & \quad X0 (k3\_robins1 X0 (k1\_lattices X0 X1 X2)) (k3\_robins1 X0 X2)) = \\ & \quad k3\_robins1 X0 X2))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. (l2\_robins1 X0) \Rightarrow ((l2\_lattices X0) \wedge (l1\_robins1 X0)) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2\_struct\_0 X0) \wedge (l1\_robins1 X0)) \wedge \\ & \quad (m1\_subset\_1 X1 (u1\_struct\_0 X0))) \Rightarrow (m1\_subset\_1 (k3\_robins1 \\ & \quad X0 X1) (u1\_struct\_0 X0)) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2\_struct\_0 X0) \wedge (l2\_lattices \\ & \quad X0)) \wedge ((m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (m1\_subset\_1 X2 (u1\_struct\_0 \\ & \quad X0)))) \Rightarrow (m1\_subset\_1 (k1\_lattices X0 X1 X2) (u1\_struct\_0 X0)) \end{aligned} \tag{5}$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v1\_robbins2 X0) \wedge (l2\_robbins1 X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (k3\_robbins1 X0 (k1\_lattices X0 X1 X1) = k3\_robbins1 X0 X1))$$