t22_robbins4 (TMN9gpnLgBPs5TCRYJMJsqrXjy6Ft5sbTFq)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_robbins4 : \iota$ be given. Let $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_3 : \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k3\_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_yellow\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Let $k1\_yellow\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_robbins4 : \iota$ be given. Let $k13\_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k4\_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Assume the following.

$$\forall X0.(u1\_struct\_0\ (k2\_yellow\_1\ X0) = X0) \wedge (u1\_orders\_2\ (k2\_yellow\_1\ X0) = k1\_yellow\_1\ X0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_robbins4)) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_robbins4)) \Rightarrow (((X0 = k6\_subset\_1\ np\_\_3\ np\_\_2) \wedge (X1 = np\_\_2)) \Rightarrow ((k13\_lattice3\ k1\_robbins4\ X0\ X1 = np\_\_3) \wedge (k12\_lattice3\ k1\_robbins4\ X0\ X1 = k6\_numbers)))) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_robbins4)) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_robbins4)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ k2\_robbins4)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ k2\_robbins4)) \Rightarrow (((X0 = X2) \wedge (X1 = X3)) \Rightarrow ((k13\_lattice3\ k1\_robbins4\ X0\ X1 = k3\_lattices\ k2\_robbins4\ X2\ X3) \wedge (k12\_lattice3\ k1\_robbins4\ X0\ X1 = k4\_lattices\ k2\_robbins4\ X2\ X3))))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.\\ \forall X6.(X6 = k4\_enumset1\ X0\ X1\ X2\ X3\ X4\ X5)\Leftrightarrow(\forall X7.(X7 \in X6)\Leftrightarrow\\ (\neg(X7{\neq}X0)\wedge((X7{\neq}X1)\wedge((X7{\neq}X2)\wedge((X7{\neq}X3)\wedge((X7{\neq}X4)\wedge(X7{\neq}X5)))))))) \tag{5}$$

Assume the following.

$$k1\_robbins4 = k2\_yellow\_1\ (k4\_enumset1\ k6\_numbers\ np\_\_1\ (k6\_subset\_1\\ np\_\_3\ np\_\_1)\ np\_\_2\ (k6\_subset\_1\ np\_\_3\ np\_\_2)\ np\_\_3) \tag{6}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k2\_robbins4))\Rightarrow(\forall X1.\\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ k2\_robbins4))\Rightarrow(((X0 = k6\_subset\_1\\ np\_\_3\ np\_\_2)\wedge(X1 = np\_\_2))\Rightarrow(k3\_lattices\ k2\_robbins4\ X0\ X1 = np\_\_3)))$$