t9_yellow16 (TMSttVmaRchMr7Prdyv9ziLBYipNE524uZh)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v3\_orders\_2 : \iota \Rightarrow o$ be given. Let $v4\_orders\_2 : \iota \Rightarrow o$ be given. Let $v5\_orders\_2 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $v24\_waybel\_0 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $r1\_yellow16 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2\_yellow16 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_yellow\_9 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v4\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v22\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_orders\_2\ X0) \wedge ((v4\_orders\_2\ X0) \wedge ((v5\_orders\_2\ X0) \wedge (l1\_orders\_2\ X0))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v3\_orders\_2\ X1) \wedge ((v4\_orders\_2\ X1) \wedge ((v5\_orders\_2\ X1) \wedge (l1\_orders\_2\ X1))))) \Rightarrow (\forall X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \Rightarrow ((r1\_yellow16\ X0\ X1\ X2) \Rightarrow (k3\_relat\_1\ (k1\_yellow\_9\ X1\ X0)\ X2 = k3\_struct\_0\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_orders\_2\ X0) \wedge ((v4\_orders\_2\ X0) \wedge ((v5\_orders\_2\ X0) \wedge ((v24\_waybel\_0\ X0) \wedge (l1\_orders\_2\ X0)))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v4\_yellow\_0\ X1\ X0) \wedge ((v4\_waybel\_0\ X1\ X0) \wedge (m1\_yellow\_0\ X1\ X0)))) \Rightarrow (v22\_waybel\_0\ (k1\_yellow\_9\ X0\ X1)\ X1\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow (l1\_struct\_0\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_struct\_0\ X0)\wedge(l1\_struct\_0\ X1))\Rightarrow(\\(v1\_funct\_1\ (k1\_yellow\_9\ X0\ X1))\wedge((v1\_funct\_2\ (k1\_yellow\_9\ X0\\ X1)\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (k1\_yellow\_9 \quad (4)\\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\\ X0))))))$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\\ X0)\wedge((v5\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0)))))\Rightarrow(\forall X1.((\neg\\ v2\_struct\_0\ X1)\wedge((v3\_orders\_2\ X1)\wedge((v4\_orders\_2\ X1)\wedge((v5\_orders\_2\\ X1)\wedge(l1\_orders\_2\ X1)))))\Rightarrow(\forall X2.((v1\_relat\_1\ X2)\wedge(v1\_funct\_1\\ X2))\Rightarrow((r2\_yellow16\ X0\ X1\ X2)\Leftrightarrow(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\\ X2\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))\wedge((v22\_waybel\_0\ X2\ X1\ X0)\wedge\\ (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\\ X0)))))))\wedge(\exists X3.((v1\_funct\_1\ X3)\wedge((v1\_funct\_2\ X3\ (u1\_struct\_0\\ X0)\ (u1\_struct\_0\ X1))\wedge((v22\_waybel\_0\ X3\ X0\ X1)\wedge(m1\_subset\_1\ X3\\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)))))))\wedge\\ (k3\_relat\_1\ X3\ X2 = k3\_struct\_0\ X0))))))\\ (5)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\\ X0)\wedge((v5\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0)))))\Rightarrow(\forall X1.((\neg\\ v2\_struct\_0\ X1)\wedge((v3\_orders\_2\ X1)\wedge((v4\_orders\_2\ X1)\wedge((v5\_orders\_2\\ X1)\wedge(l1\_orders\_2\ X1)))))\Rightarrow(\forall X2.((v1\_relat\_1\ X2)\wedge(v1\_funct\_1\\ X2))\Rightarrow((r1\_yellow16\ X0\ X1\ X2)\Leftrightarrow(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\\ X2\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))\wedge((v22\_waybel\_0\ X2\ X1\ X0)\wedge\\ (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\\ X0)))))))\wedge((k5\_relat\_1\ X2\ (u1\_struct\_0\ X0) = k3\_struct\_0\ X0)\wedge\\ ((v4\_yellow\_0\ X0\ X1)\wedge((v4\_waybel\_0\ X0\ X1)\wedge(m1\_yellow\_0\ X0\ X1))))))))\\ (6)$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\\ X0)\wedge((v5\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0)))))\Rightarrow(\forall X1.((\neg\\ v2\_struct\_0\ X1)\wedge((v3\_orders\_2\ X1)\wedge((v4\_orders\_2\ X1)\wedge((v5\_orders\_2\\ X1)\wedge((v24\_waybel\_0\ X1)\wedge(l1\_orders\_2\ X1))))))\Rightarrow(\forall X2.(\\ (v1\_relat\_1\ X2)\wedge(v1\_funct\_1\ X2))\Rightarrow((r1\_yellow16\ X0\ X1\ X2)\Rightarrow(r2\_yellow16\\ X0\ X1\ X2))))$$