

## t23\_yellow10

(TMazpeC7KdnetzDjBg7GgB4SLZEBMwZt1h8)

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  $v24\_waybel\_0 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k3\_yellow\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_waybel\_3 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_yellow\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_yellow\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_waybel\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\
 & X0) \wedge ((v5\_orders\_2 X0) \wedge ((v24\_waybel\_0 X0) \wedge (l1\_orders\_2 X0)))))) \Rightarrow \\
 & (\forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v3\_orders\_2 X1) \wedge ((v4\_orders\_2 \\
 & X1) \wedge ((v5\_orders\_2 X1) \wedge ((v24\_waybel\_0 X1) \wedge (l1\_orders\_2 X1)))))) \Rightarrow \\
 & (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 (k3\_yellow\_3 X0 X1))) \Rightarrow \\
 & (\forall X3. (m1\_subset\_1 X3 (u1\_struct\_0 (k3\_yellow\_3 X0 X1))) \Rightarrow \\
 & ((r1\_waybel\_3 (k3\_yellow\_3 X0 X1) X2 X3) \Leftrightarrow ((r1\_waybel\_3 X0 (k8\_yellow\_3 \\
 & X0 X1 X2) (k8\_yellow\_3 X0 X1 X3)) \wedge (r1\_waybel\_3 X1 (k9\_yellow\_3 X0 \\
 & X1 X2) (k9\_yellow\_3 X0 X1 X3))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. (((v3\_orders\_2 X0) \wedge (l1\_orders\_2 X0)) \wedge \\
 & ((v3\_orders\_2 X1) \wedge (l1\_orders\_2 X1))) \Rightarrow ((v1\_orders\_2 (k3\_yellow\_3 \\
 & X0 X1)) \wedge (v3\_orders\_2 (k3\_yellow\_3 X0 X1)))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. (((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 X0)) \wedge \\
 & ((\neg v2\_struct\_0 X1) \wedge (l1\_orders\_2 X1))) \Rightarrow ((\neg v2\_struct\_0 (k3\_yellow\_3 \\
 & X0 X1)) \wedge (v1\_orders\_2 (k3\_yellow\_3 X0 X1)))
 \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. \forall X2. (((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 \\
 & X0)) \wedge (((\neg v2\_struct\_0 X1) \wedge (l1\_orders\_2 X1)) \wedge (m1\_subset\_1 X2 \\
 & (u1\_struct\_0 (k3\_yellow\_3 X0 X1)))) \Rightarrow (m1\_subset\_1 (k9\_yellow\_3 \\
 & X0 X1 X2) (u1\_struct\_0 X1))
 \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0 X0)\wedge(l1\_orders\_2 \\ & X0))\wedge(((\neg v2\_struct\_0 X1)\wedge(l1\_orders\_2 X1))\wedge(m1\_subset\_1 X2 \\ & (u1\_struct\_0 (k3\_yellow\_3 X0 X1))))))\Rightarrow(m1\_subset\_1 (k8\_yellow\_3 \\ & X0 X1 X2) (u1\_struct\_0 X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((l1\_orders\_2 X0)\wedge(l1\_orders\_2 X1))\Rightarrow( \\ & (v1\_orders\_2 (k3\_yellow\_3 X0 X1))\wedge(l1\_orders\_2 (k3\_yellow\_3 \\ & X0 X1))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0)\wedge((v3\_orders\_2 X0)\wedge(l1\_orders\_2 \\ & X0)))\Rightarrow(\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0))\Rightarrow((v1\_waybel\_3 \\ & X1 X0)\Leftrightarrow(r1\_waybel\_3 X0 X1 X1))) \end{aligned} \quad (7)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0)\wedge((v3\_orders\_2 X0)\wedge((v4\_orders\_2 \\ & X0)\wedge((v5\_orders\_2 X0)\wedge((v24\_waybel\_0 X0)\wedge(l1\_orders\_2 X0))))))\Rightarrow \\ & (\forall X1.((\neg v2\_struct\_0 X1)\wedge((v3\_orders\_2 X1)\wedge((v4\_orders\_2 \\ & X1)\wedge((v5\_orders\_2 X1)\wedge((v24\_waybel\_0 X1)\wedge(l1\_orders\_2 X1))))))\Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 (k3\_yellow\_3 X0 X1)))\Rightarrow \\ & (((v1\_waybel\_3 (k8\_yellow\_3 X0 X1 X2) X0)\wedge(v1\_waybel\_3 (k9\_yellow\_3 \\ & X0 X1 X2) X1))\Rightarrow(v1\_waybel\_3 X2 (k3\_yellow\_3 X0 X1)))))) \end{aligned}$$