

# t34\_yellow\_2 (TMczPWVndwvhibiFNix- EeoiAVwLcGCjQKEH)

October 27, 2020

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  $v1\_lattice3 : \iota \Rightarrow o$  be given. Let  $v2\_lattice3 : \iota \Rightarrow o$  be given. Let  $v3\_lattice3 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  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  $v18\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v17\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_yellow\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v7\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v8\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v4\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 \\
 & X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge ((v3\_lattice3 X0) \wedge \\
 & (l1\_orders\_2 X0)))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge (l1\_orders\_2 \\
 & X1)) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 \\
 & X0) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
 & (u1\_struct\_0 X0) (u1\_struct\_0 X1)))))) \Rightarrow ((v17\_waybel\_0 X2 X0 X1) \Rightarrow \\
 & (v7\_yellow\_0 (k1\_yellow\_2 X0 X1 X2) X1))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 \\
 & X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge ((v3\_lattice3 X0) \wedge \\
 & (l1\_orders\_2 X0)))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge (l1\_orders\_2 \\
 & X1)) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 \\
 & X0) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
 & (u1\_struct\_0 X0) (u1\_struct\_0 X1)))))) \Rightarrow ((v18\_waybel\_0 X2 X0 X1) \Rightarrow \\
 & (v8\_yellow\_0 (k1\_yellow\_2 X0 X1 X2) X1))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 \\ & X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge ((v3\_lattice3 X0) \wedge \\ & (l1\_orders\_2 X0)))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v4\_yellow\_0 \\ & X1 X0) \wedge ((v8\_yellow\_0 X1 X0) \wedge (m1\_yellow\_0 X1 X0)))) \Rightarrow ((v3\_orders\_2 \\ & X1) \wedge ((v4\_orders\_2 X1) \wedge ((v5\_orders\_2 X1) \wedge ((v1\_lattice3 X1) \wedge \\ & ((v2\_lattice3 X1) \wedge ((v3\_lattice3 X1) \wedge (l1\_orders\_2 X1)))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 \\ & X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge ((v3\_lattice3 X0) \wedge \\ & (l1\_orders\_2 X0)))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v4\_yellow\_0 \\ & X1 X0) \wedge ((v7\_yellow\_0 X1 X0) \wedge (m1\_yellow\_0 X1 X0)))) \Rightarrow ((v3\_orders\_2 \\ & X1) \wedge ((v4\_orders\_2 X1) \wedge ((v5\_orders\_2 X1) \wedge ((v1\_lattice3 X1) \wedge \\ & ((v2\_lattice3 X1) \wedge ((v3\_lattice3 X1) \wedge (l1\_orders\_2 X1)))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 \\ & X0)) \wedge (((\neg v2\_struct\_0 X1) \wedge (l1\_orders\_2 X1)) \wedge ((v1\_funct\_1 X2) \wedge \\ & ((v1\_funct\_2 X2 (u1\_struct\_0 X0) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X1)))))) \Rightarrow \\ & ((\neg v2\_struct\_0 (k1\_yellow\_2 X0 X1 X2)) \wedge ((v1\_orders\_2 (k1\_yellow\_2 \\ & X0 X1 X2)) \wedge (v4\_yellow\_0 (k1\_yellow\_2 X0 X1 X2) X1))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 \\ & X0)) \wedge (((\neg v2\_struct\_0 X1) \wedge (l1\_orders\_2 X1)) \wedge ((v1\_funct\_1 X2) \wedge \\ & ((v1\_funct\_2 X2 (u1\_struct\_0 X0) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X1)))))) \Rightarrow \\ & ((v1\_orders\_2 (k1\_yellow\_2 X0 X1 X2)) \wedge ((v4\_yellow\_0 (k1\_yellow\_2 \\ & X0 X1 X2) X1) \wedge (m1\_yellow\_0 (k1\_yellow\_2 X0 X1 X2) X1))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. (l1\_orders\_2 X0) \Rightarrow ((v1\_lattice3 X0) \Rightarrow (\neg v2\_struct\_0 X0)) \quad (7)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 \\ & X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge ((v3\_lattice3 X0) \wedge \\ & (l1\_orders\_2 X0)))))) \Rightarrow (\forall X1.((v3\_orders\_2 X1) \wedge ((v4\_orders\_2 \\ & X1) \wedge ((v5\_orders\_2 X1) \wedge ((v1\_lattice3 X1) \wedge ((v2\_lattice3 X1) \wedge \\ & ((v3\_lattice3 X1) \wedge (l1\_orders\_2 X1)))))) \Rightarrow (\forall X2.((v1\_funct\_1 \\ & X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 X0) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X1)))))) \Rightarrow \\ & ((v18\_waybel\_0 X2 X0 X1) \vee (v17\_waybel\_0 X2 X0 X1)) \Rightarrow ((v3\_orders\_2 \\ & (k1\_yellow\_2 X0 X1 X2)) \wedge ((v4\_orders\_2 (k1\_yellow\_2 X0 X1 X2)) \wedge \\ & ((v5\_orders\_2 (k1\_yellow\_2 X0 X1 X2)) \wedge ((v1\_lattice3 (k1\_yellow\_2 \\ & X0 X1 X2)) \wedge ((v2\_lattice3 (k1\_yellow\_2 X0 X1 X2)) \wedge ((v3\_lattice3 \\ & (k1\_yellow\_2 X0 X1 X2)) \wedge (l1\_orders\_2 (k1\_yellow\_2 X0 X1 X2)))))))))) \end{aligned}$$