

t45\_yellow\_0  
(TMSyj89JsghSQozf1FZYS3yjWDV75yN4aRo)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v5\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v2\_yellow\_0 : \iota \Rightarrow o$  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  $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_yellow\_0 : \iota \Rightarrow \iota$  be given. Let  $r2\_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0) \Rightarrow ((r2\_lattice3 X0 k1\_xboole\_0 X1) \wedge (r1\_lattice3 X0 k1\_xboole\_0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v5\_orders\_2 X0) \wedge ((v2\_yellow\_0 X0) \wedge (l1\_orders\_2 X0)))) \Rightarrow ((r2\_yellow\_0 X0 k1\_xboole\_0) \wedge (r1\_yellow\_0 X0 (u1\_struct\_0 X0))) \quad (2)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (m1\_subset\_1 (k4\_yellow\_0 X0) (u1\_struct\_0 X0)) \quad (3)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (k4\_yellow\_0 X0 = k2\_yellow\_0 X0 k1\_xboole\_0) \quad (4)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (\forall X1.\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0) \Rightarrow ((r2\_yellow\_0 X0 X1) \Rightarrow ((X2 = k2\_yellow\_0 X0 X1) \Leftrightarrow ((r1\_lattice3 X0 X1 X2) \wedge (\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 X0) \Rightarrow ((r1\_lattice3 X0 X1 X3) \Rightarrow (r1\_orders\_2 X0 X3 X2)))))))) \quad (5)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (v5\_orders\_2 X0) \wedge ((v2\_yellow\_0 X0) \wedge (l1\_orders\_2 X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (r1\_orders\_2 X0 X1 (k4\_yellow\_0 X0)))$$