

t13\_yellow14 (TM-  
MJbUrw25zMeTj9vC9pU5uamxWThLsotfD)

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Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v3\_yellow\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r2\_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_yellow\_0 : \iota \Rightarrow o$  be given. Let  $v1\_yellow\_0 : \iota \Rightarrow o$  be given. Let  $k2\_struct\_0 : \iota \Rightarrow \iota$  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.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (2)$$

Assume the following.

$$\forall X0.((v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (v1\_xboole\_0 (u1\_struct\_0 X0)) \quad (3)$$

Assume the following.

$$\forall X0.\exists X1.m1\_subset\_1 X1 X0 \quad (4)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (l1\_struct\_0 X0) \quad (5)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v2\_yellow\_0 X0) \Leftrightarrow (\exists X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (r2\_lattice3 X0 (u1\_struct\_0 X0) X1))) \quad (6)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v1\_yellow\_0 X0) \Leftrightarrow (\exists X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (r1\_lattice3 X0 (u1\_struct\_0 X0) X1))) \quad (7)$$

Assume the following.

$$\forall X0.(l1\_struct\_0 X0) \Rightarrow (k2\_struct\_0 X0 = u1\_struct\_0 X0) \quad (8)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (((v1\_yellow\_0 X0) \wedge (v2\_yellow\_0 X0)) \Rightarrow (v3\_yellow\_0 X0)) \quad (9)$$

**Theorem 1**  $\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v2\_struct\_0 X0) \Rightarrow (v3\_yellow\_0 X0)).$