

t1\_waybel22 (TMb-  
WhatNr2LRYLxw4fczQaSD5nXTj85MGR6)

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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  $v2\_yellow\_0 : \iota \Rightarrow o$  be given. Let  $v2\_lattice3 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_yellow\_1 : \iota \Rightarrow \iota$  be given. Let  $k8\_waybel\_0 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $v1\_lattice3 : \iota \Rightarrow o$  be given. Let  $v1\_yellow\_0 : \iota \Rightarrow o$  be given. Let  $k7\_waybel\_0 : \iota \Rightarrow \iota$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $k7\_lattice3 : \iota \Rightarrow \iota$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 \\ & X0) \wedge ((v1\_lattice3 X0) \wedge ((v1\_yellow\_0 X0) \wedge (l1\_orders\_2 X0)))))) \Rightarrow \\ & (\forall X1.((\neg v1\_xboole\_0 X1) \wedge ((v1\_waybel\_0 X1 (k2\_yellow\_1 \\ & (k7\_waybel\_0 X0))) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & (k2\_yellow\_1 (k7\_waybel\_0 X0)))))) \Rightarrow (k1\_yellow\_0 (k2\_yellow\_1 \\ & (k7\_waybel\_0 X0)) X1 = k3\_tarski X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge (l1\_orders\_2 X0)))) \Rightarrow (k8\_waybel\_0 X0 = k7\_waybel\_0 (k7\_lattice3 X0)) \quad (2)$$

Assume the following.

$$\forall X0.((v2\_lattice3 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow ((v1\_orders\_2 (k7\_lattice3 X0)) \wedge (v1\_lattice3 (k7\_lattice3 X0))) \quad (3)$$

Assume the following.

$$\forall X0.((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 X0) \wedge (l1\_orders\_2 X0)))) \Rightarrow ((v1\_orders\_2 (k7\_lattice3 X0)) \wedge ((v3\_orders\_2 (k7\_lattice3 X0)) \wedge ((v4\_orders\_2 (k7\_lattice3 X0)) \wedge (v5\_orders\_2 (k7\_lattice3 X0)))))) \quad (4)$$

Assume the following.

$$\forall X0.((v2\_yellow\_0 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow ((v1\_orders\_2 (k7\_lattice3 X0)) \wedge (v1\_yellow\_0 (k7\_lattice3 X0))) \quad (5)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v1\_orders\_2 (k7\_lattice3 X0)) \wedge (l1\_orders\_2 (k7\_lattice3 X0))) \quad (6)$$

Assume the following.

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

**Theorem 1**

$$\begin{aligned} & \forall X0.((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 \\ & X0) \wedge ((v2\_yellow\_0 X0) \wedge ((v2\_lattice3 X0) \wedge (l1\_orders\_2 X0)))))) \Rightarrow \\ & (\forall X1.((\neg v1\_xboole\_0 X1) \wedge ((v1\_waybel\_0 X1 (k2\_yellow\_1 \\ & (k8\_waybel\_0 X0))) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & (k2\_yellow\_1 (k8\_waybel\_0 X0))))))) \Rightarrow (k1\_yellow\_0 (k2\_yellow\_1 \\ & (k8\_waybel\_0 X0)) X1 = k3\_tarski X1)) \end{aligned}$$