

## t17\_waybel16

(TMY2m8V6BwhGJeZq74EpR8KNbSNzu2vhLgh)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  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  $k2\_yellow\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $k1\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r3\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v5\_orders\_2 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $r2\_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v3\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v4\_orders\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (\forall X2. (X2 \in X0) \Rightarrow (r1\_tarski X2 X1)) \Rightarrow (r1\_tarski (k3\_tarski X0) X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 (k2\_yellow\_1 X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 (k2\_yellow\_1 X0))) \Rightarrow ((r3\_orders\_2 (k2\_yellow\_1 X0) X1 X2) \Leftrightarrow (r1\_tarski X1 X2)))) \quad (3)$$

Assume the following.

$$\forall X0. ((v5\_orders\_2 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. (((X1 = k1\_yellow\_0 X0 X2) \wedge (r1\_yellow\_0 X0 X2)) \Rightarrow ((r2\_lattice3 X0 X2 X1) \wedge (\forall X3. (m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow ((r2\_lattice3 X0 X2 X3) \Rightarrow (r1\_orders\_2 X0 X1 X3)))))) \wedge (((r2\_lattice3 X0 X2 X1) \wedge (\forall X3. (m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow ((r2\_lattice3 X0 X2 X3) \Rightarrow (r1\_orders\_2 X0 X1 X3)))) \Rightarrow ((X1 = k1\_yellow\_0 X0 X2) \wedge (r1\_yellow\_0 X0 X2)))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0 X0)\wedge((v3\_orders\_2 X0)\wedge(l1\_orders\_2 X0)))\wedge((m1\_subset\_1 X1 (u1\_struct\_0 X0))\wedge(m1\_subset\_1 X2 (u1\_struct\_0 X0))))\Rightarrow((r3\_orders\_2 X0 X1 X2)\Leftrightarrow(r1\_orders\_2 X0 X1 X2))) \quad (5)$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow((\neg v2\_struct\_0 (k2\_yellow\_1 X0))\wedge(v1\_orders\_2 (k2\_yellow\_1 X0))) \quad (6)$$

Assume the following.

$$\forall X0.(v1\_orders\_2 (k2\_yellow\_1 X0))\wedge((v3\_orders\_2 (k2\_yellow\_1 X0))\wedge((v4\_orders\_2 (k2\_yellow\_1 X0))\wedge(v5\_orders\_2 (k2\_yellow\_1 X0)))) \quad (7)$$

Assume the following.

$$\forall X0.(v1\_orders\_2 (k2\_yellow\_1 X0))\wedge(l1\_orders\_2 (k2\_yellow\_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(l1\_orders\_2 X0)\Rightarrow(m1\_subset\_1 (k1\_yellow\_0 X0 X1) (u1\_struct\_0 X0)) \quad (9)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0)\Rightarrow(\forall X1.\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0))\Rightarrow((r2\_lattice3 X0 X1 X2)\Leftrightarrow(\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 X0))\Rightarrow((X3 \in X1)\Rightarrow(r1\_orders\_2 X0 X3 X2)))))) \quad (10)$$

**Theorem 1**

$$\forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.((\neg v1\_xboole\_0 X1)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 (k2\_yellow\_1 X0))))))\Rightarrow((r1\_yellow\_0 (k2\_yellow\_1 X0) X1)\Rightarrow(r1\_tarSKI (k3\_tarSKI X1 (k1\_yellow\_0 (k2\_yellow\_1 X0) X1))))))$$