

t3\_waybel10  
(TMbaX3UziLqvFGT55gBQt1SiUecVog1UhG6)

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Let  $l1\_orders\_2 : \iota \Rightarrow o$  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  $k7\_lattice3 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k2\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_wellord1 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $k3\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_toler\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $g1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow (\forall X1.k2\_relat\_1 (k2\_wellord1 X0 X1) = k2\_wellord1 (k2\_relat\_1 X0) X1) \quad (1)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (\forall X1.(l1\_orders\_2 X1) \Rightarrow ((m1\_yellow\_0 X1 X0) \Rightarrow (m1\_yellow\_0 (k7\_lattice3 X1) (k7\_lattice3 X0))) \wedge (((m1\_yellow\_0 (k7\_lattice3 X1) (k7\_lattice3 X0)) \Rightarrow (m1\_yellow\_0 X1 X0)) \wedge (((m1\_yellow\_0 (k7\_lattice3 X1) X0) \Rightarrow (m1\_yellow\_0 X1 (k7\_lattice3 X0))) \wedge (((m1\_yellow\_0 X1 (k7\_lattice3 X0)) \Rightarrow (m1\_yellow\_0 (k7\_lattice3 X1) X0)))))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow (k3\_relset\_1 X0 X1 X2 = k2\_relat\_1 X2) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1 X0) \Rightarrow (k1\_toler\_1 X0 X1 = k2\_wellord1 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow (k2\_relat\_1 (k2\_relat\_1 X0) = X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))\Rightarrow(\forall X2.\forall X3.(g1\_orders\_2 X0 X1 = g1\_orders\_2 X2 X3)\Rightarrow((X0 = X2)\wedge(X1 = X3))) \quad (6)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0)\Rightarrow(m1\_subset\_1 (u1\_orders\_2 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)))) \quad (7)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0)\Rightarrow((v1\_orders\_2 (k7\_lattice3 X0))\wedge(l1\_orders\_2 (k7\_lattice3 X0))) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 X0)\Rightarrow(v1\_relat\_1 (k2\_relat\_1 X0)) \quad (9)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0)\Rightarrow(k7\_lattice3 X0 = g1\_orders\_2 (u1\_struct\_0 X0) (k3\_relset\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_orders\_2 X0))) \quad (10)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0)\Rightarrow(\forall X1.(m1\_yellow\_0 X1 X0)\Rightarrow((v4\_yellow\_0 X1 X0)\Leftrightarrow(u1\_orders\_2 X1 = k1\_toler\_1 (u1\_orders\_2 X0) (u1\_struct\_0 X1)))) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_relat\_1 X2) \quad (12)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0)\Rightarrow((v1\_orders\_2 X0)\Rightarrow(X0 = g1\_orders\_2 (u1\_struct\_0 X0) (u1\_orders\_2 X0))) \quad (13)$$

**Theorem 1**

$$\forall X0.(l1\_orders\_2 X0)\Rightarrow(\forall X1.(l1\_orders\_2 X1)\Rightarrow(((v4\_yellow\_0 X1 X0)\wedge(m1\_yellow\_0 X1 X0))\Rightarrow((v4\_yellow\_0 (k7\_lattice3 X1) (k7\_lattice3 X0))\wedge(m1\_yellow\_0 (k7\_lattice3 X1) (k7\_lattice3 X0))))\wedge(((v4\_yellow\_0 (k7\_lattice3 X1) (k7\_lattice3 X0))\wedge(m1\_yellow\_0 (k7\_lattice3 X1) (k7\_lattice3 X0)))\Rightarrow((v4\_yellow\_0 X1 X0)\wedge(m1\_yellow\_0 X1 X0)))\wedge(((v4\_yellow\_0 (k7\_lattice3 X1) X0)\wedge(m1\_yellow\_0 (k7\_lattice3 X1) X0))\Rightarrow((v4\_yellow\_0 X1 (k7\_lattice3 X0))\wedge(m1\_yellow\_0 X1 (k7\_lattice3 X0))))\wedge(((v4\_yellow\_0 X1 (k7\_lattice3 X0))\wedge(m1\_yellow\_0 X1 (k7\_lattice3 X0)))\Rightarrow((v4\_yellow\_0 (k7\_lattice3 X1) X0)\wedge(m1\_yellow\_0 (k7\_lattice3 X1) X0))))))$$