

## t110\_abcmiz\_1

(TMW63iKm2K9FGb5M5BZqwepeZCUjPk52zDt)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k49\_abcmiz\_1 : \iota$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_abcmiz\_1 : \iota$  be given. Let  $k1\_abcmiz\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k2\_yellow\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Let  $k1\_yellow\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $g1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. 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  $k7\_lattice3 : \iota \Rightarrow \iota$  be given. Let  $k3\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. ((v1\_finset\_1 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 k2\_abcmiz\_1))) \Rightarrow ((v1\_finset\_1 (k1\_abcmiz\_1 X0)) \wedge (m1\_subset\_1 (k1\_abcmiz\_1 X0) (k1\_zfmisc\_1 k2\_abcmiz\_1))) \quad (2)$$

Assume the following.

$$\forall X0. (u1\_struct\_0 (k2\_yellow\_1 X0) = X0) \wedge (u1\_orders\_2 (k2\_yellow\_1 X0) = k1\_yellow\_1 X0) \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0. k1\_abcmiz\_1 (k1\_abcmiz\_1 X0) = k1\_abcmiz\_1 X0 \quad (5)$$

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.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\neg v1\_xboole\_0 (u1\_struct\_0 X0)) \quad (7)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (m1\_subset\_1 (u1\_orders\_2 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)))) \quad (8)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (l1\_struct\_0 X0) \quad (9)$$

Assume the following.

$$(\neg v2\_struct\_0 k49\_abcmiz\_1) \wedge ((v1\_orders\_2 k49\_abcmiz\_1) \wedge (v3\_orders\_2 k49\_abcmiz\_1) \wedge ((v4\_orders\_2 k49\_abcmiz\_1) \wedge ((v5\_orders\_2 k49\_abcmiz\_1) \wedge (l1\_orders\_2 k49\_abcmiz\_1)))) \quad (10)$$

Assume the following.

$$\forall X0.(v1\_orders\_2 (k2\_yellow\_1 X0)) \wedge (l1\_orders\_2 (k2\_yellow\_1 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (k7\_lattice3 X0 = g1\_orders\_2 (u1\_struct\_0 X0) (k3\_reset\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_orders\_2 X0))) \quad (12)$$

Assume the following.

$$k49\_abcmiz\_1 = k7\_lattice3 (k2\_yellow\_1 (ReplSep (toset (\lambda X0 : \iota.(v1\_finset\_1 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 k2\_abcmiz\_1)))))) (\lambda X0 : \iota.True) (\lambda X0 : \iota.k1\_abcmiz\_1 X0)) \quad (13)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v1\_orders\_2 X0) \Rightarrow (X0 = g1\_orders\_2 (u1\_struct\_0 X0) (u1\_orders\_2 X0))) \quad (14)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 k49\_abcmiz\_1)) \Leftrightarrow (((v1\_finset\_1 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 k2\_abcmiz\_1))) \wedge (k1\_abcmiz\_1 X0 = X0))$$