

l24\_c0sp2  
(TMPiJAm6VkDWkq4eztV7fRpxgCdc6jA2erS)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v1\_compts\_1 : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $k4\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_c0sp2 : \iota \Rightarrow \iota$  be given. Let  $k11\_c0sp1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k8\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k1\_c0sp2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \neg(v1\_xboole\_0 X0) \wedge ((X0 \neq X1) \wedge (v1\_xboole\_0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (k8\_funcop\_1 k5\_numbers X0 k6\_numbers = k4\_struct\_0 (k11\_c0sp1 X0)) \quad (2)$$

Assume the following.

$$m1\_subset\_1 k1\_xboole\_0 k4\_ordinal1 \quad (3)$$

Assume the following.

$$\forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge ((v1\_compts\_1 X0) \wedge (l1\_pre\_topc X0)))) \Rightarrow (k1\_c0sp2 X0 k6\_numbers = k4\_struct\_0 (k5\_c0sp2 X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0 X0) \wedge (m1\_subset\_1 X2 X0)) \Rightarrow (k8\_funcop\_1 X0 X1 X2 = k2\_funcop\_1 X1 X2) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.k7\_funcop\_1 X0 X1 = k2\_funcop\_1 X0 X1 \quad (6)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (7)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (8)$$

Assume the following.

$$\exists X0.(v1\_xboole\_0 X0) \wedge ((v1\_xcmplx\_0 X0) \wedge ((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X0))) \quad (9)$$

Assume the following.

$$(\neg v1\_xboole\_0 k4\_ordinal1) \wedge (v3\_ordinal1 k4\_ordinal1) \quad (10)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\neg v1\_xboole\_0 (u1\_struct\_0 X0)) \quad (11)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (12)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (l1\_struct\_0 X0) \quad (13)$$

Assume the following.

$$\forall X0.(l1\_struct\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (k1\_c0sp2 X0 X1 = k7\_funcop\_1 (u1\_struct\_0 X0) X1)) \quad (14)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge ((v1\_compts\_1 X0) \wedge (l1\_pre\_topc X0)))) \Rightarrow (k4\_struct\_0 (k5\_c0sp2 X0) = k4\_struct\_0 (k11\_c0sp1 (u1\_struct\_0 X0)))$$