

t30\_ospace  
(TMKnDE1KKfrUtmSBFJCAGJ5ZHzu36g1Y75)

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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  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k7\_ospace : \iota \Rightarrow \iota$  be given. Let  $k9\_ospace : \iota \Rightarrow \iota$  be given. Let  $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k8\_ospace : \iota \Rightarrow \iota$  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.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \quad (2)$$

Assume the following.

$$\forall X0. k9\_ospace X0 = k8\_ospace X0 \quad (3)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\neg v1\_xboole\_0 (k8\_ospace X0)) \quad (4)$$

Assume the following.

$$\forall X0. m1\_subset\_1 (k9\_ospace X0) (k1\_zfmisc\_1 (u1\_struct\_0 (k7\_ospace X0))) \quad (5)$$

Assume the following.

$$\forall X0. k8\_ospace X0 = \text{ReplSep} (\text{toset} (\lambda X1 : \iota. m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))) (\lambda X1 : \iota. v3\_card\_1 X1 np\_1) (\lambda X1 : \iota. X1) \quad (6)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_xboole\_0 X1)) \quad (7)$$

**Theorem 1**

$$\forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow ((m2\_subset\_1 X1 (u1\_struct\_0 (k7\_bspace X0)) (k9\_bspace X0)) \Rightarrow (v3\_card\_1 X1 np\_1)))$$