

t19\_tex\_1

(TMYrr2dMor8sT2ZBHfZbJPGgUVMgjfRGiP9)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k2\_tex\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_compts\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $g1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_subset\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_tex\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0.k1\_zfmisc\_1 (k1\_tarski X0) = k2\_tarski k1\_xboole\_0 (k1\_tarski X0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski X0 X0 \quad (4)$$

Assume the following.

$$\forall X0.k9\_setfam\_1 X0 = k1\_zfmisc\_1 X0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (k6\_domain\_1 X0 X1 = k1\_tarski X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0))) \Rightarrow (\forall X2.\forall X3.(g1\_pre\_topc X0 X1 = g1\_pre\_topc X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (7)$$

Assume the following.

$$\forall X0. \neg v1\_xboole\_0 (k1\_tarski X0) \quad (8)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (9)$$

Assume the following.

$$\forall X0. \neg v1\_xboole\_0 (k1\_zfmisc\_1 X0) \quad (10)$$

Assume the following.

$$\forall X0. \exists X1. m1\_subset\_1 X1 X0 \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (m1\_subset\_1 (k6\_domain\_1 X0 X1) (k1\_zfmisc\_1 X0)) \quad (12)$$

Assume the following.

$$\forall X0. k1\_compts\_1 X0 = g1\_pre\_topc X0 (k2\_subset\_1 (k9\_setfam\_1 X0)) \quad (13)$$

Assume the following.

$$\forall X0. k2\_tex\_1 X0 = g1\_pre\_topc X0 (k1\_tex\_1 X0) \quad (14)$$

Assume the following.

$$\forall X0. k2\_subset\_1 X0 = X0 \quad (15)$$

Assume the following.

$$\forall X0. k1\_tex\_1 X0 = k2\_tarski k1\_xboole\_0 X0 \quad (16)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2\_tarski X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (17)$$

**Theorem 1**

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow ((k2\_tex\_1 X0 = k1\_compts\_1 X0) \Leftrightarrow (\exists X1. (m1\_subset\_1 X1 X0) \wedge (X0 = k6\_domain\_1 X0 X1)))$$