

t1\_topgen\_1  
(TMTQyfdkw8rRimDF4K3JACv1V1AQtfZTaYL)

October 27, 2020

Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (k4\_xboole\_0 X0 X1 = k1\_xboole\_0) \Leftrightarrow (r1\_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 X0)) \Rightarrow ((r1\_xboole\_0 X1 (k3\_subset\_1 X0 X2)) \Leftrightarrow (r1\_tarski X1 X2))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (k7\_subset\_1 X0 X1 X2 = k4\_xboole\_0 X1 X2) \quad (3)$$

**Theorem 1**

$$\forall X0. (l1\_struct\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow ((\neg(\neg r1\_xboole\_0 X1 (k3\_subset\_1 (u1\_struct\_0 X0) X2)) \wedge (k7\_subset\_1 (u1\_struct\_0 X0) X1 X2 = k1\_xboole\_0)) \wedge (\neg(k7\_subset\_1 (u1\_struct\_0 X0) X1 X2 \neq k1\_xboole\_0) \wedge (r1\_xboole\_0 X1 (k3\_subset\_1 (u1\_struct\_0 X0) X2)))))))$$