

t101\_zfmisc\_1 (TMabuinSPMhW-  
BQs8QeNzfMV4o5bcKWmN8x5)

October 27, 2020

Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Rightarrow (k3\_xboole\_0 X0 X1 = X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. k2\_zfmisc\_1 (k3\_xboole\_0 X0 X1) (k3\_xboole\_0 X2 X3) = k3\_xboole\_0 (k2\_zfmisc\_1 X0 X2) (k2\_zfmisc\_1 X1 X3) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k3\_xboole\_0 X0 X1 = k3\_xboole\_0 X1 X0 \quad (3)$$

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. \forall X3. ((r1\_tarski X0 X1) \wedge (r1\_tarski X2 X3)) \Rightarrow (k3\_xboole\_0 (k2\_zfmisc\_1 X0 X3) (k2\_zfmisc\_1 X1 X2) = k2\_zfmisc\_1 X0 X2)$$