

t80\_zfmisc\_1 (TMd-  
Woqnce1kNgo2h1awQQBw81W5smXgydGt)

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

$$\forall X0. \forall X1. (\neg(\neg r1\_xboole\_0 X0 X1) \wedge (\forall X2. \neg(X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg(\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1\_xboole\_0 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k3\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. (X2 \in X3) \wedge (X3 \in X0))) \quad (2)$$

**Theorem 1**

$$\forall X0. \forall X1. (\forall X2. (X2 \in X0) \Rightarrow (r1\_xboole\_0 X2 X1)) \Rightarrow (r1\_xboole\_0 (k3\_tarski X0) X1)$$