t108_zfmisc_1 (TMdcbu1qQoXc1PAXd2Eyq98pWC2hMt6Aesr)

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Let $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(X0 \neq X1) \Rightarrow (r1\_xboole\_0\ (k1\_tarski\ X0)\ (k1\_tarski\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((r1\_xboole\_0\ X0\ X1) \vee (r1\_xboole\_0\ X2\ X3)) \Rightarrow (r1\_xboole\_0\ (k2\_zfmisc\_1\ X0\ X2)\ (k2\_zfmisc\_1\ X1\ X3)) \tag{2}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.(X0 \neq X1) \Rightarrow ((r1\_xboole\_0\ (k2\_zfmisc\_1\ (k1\_tarski\ X0)\ X2)\ (k2\_zfmisc\_1\ (k1\_tarski\ X1)\ X3)) \wedge (r1\_xboole\_0\ (k2\_zfmisc\_1\ X2\ (k1\_tarski\ X0))\ (k2\_zfmisc\_1\ X3\ (k1\_tarski\ X1))))$$