

# t2\_rpr\_1 (TMSBnrALd- kVv5U1gx7MVkECaUHdhT7GugYz)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k4\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_zfmisc\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. r1\_tarski X0 (k2\_xboole\_0 X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))) \Rightarrow (((v3\_card\_1 X1 np\_1) \wedge (m1\_subset\_1 \\ X1 (k1\_zfmisc\_1 X0))) \Leftrightarrow (\forall X2. (r1\_tarski X2 X1) \Leftrightarrow ((X2 = k1\_xboole\_0) \vee \\ (X2 = X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 X0))) \Rightarrow (k4\_subset\_1 X0 X1 X2 = k2\_xboole\_0 X1 X2) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k2\_xboole\_0 X0 X1 = k2\_xboole\_0 X1 X0 \quad (4)$$

Assume the following.

$$\forall X0. (v3\_card\_1 X0 np\_1) \Rightarrow ((\neg v1\_xboole\_0 X0) \wedge (v1\_zfmisc\_1 X0)) \quad (5)$$

## Theorem 1

$$\begin{aligned} \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 X0)) \Rightarrow (\forall X3. \\ ((v3\_card\_1 X3 np\_1) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 X0))) \Rightarrow (\neg ( \\ X3 = k4\_subset\_1 X0 X1 X2) \wedge ((X1 \neq X2) \wedge ((\neg (X1 = k1\_xboole\_0) \wedge (X2 = \\ X3)) \wedge (\neg (X1 = X3) \wedge (X2 = k1\_xboole\_0)))))))))) \end{aligned}$$