

t1\_topdim\_2  
(TMG8QzJnsGwyrR1GSgEZXPwucJAKg8425iF)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_topdim\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_topdim\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xxreal\_0 : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k6\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow ((r1\_xxreal\_0 k1\_xxreal\_0 X0) \Rightarrow (X0 = k1\_xxreal\_0)) \quad (1)$$

Assume the following.

$$\neg v1\_xreal\_0 k1\_xxreal\_0 \quad (2)$$

Assume the following.

$$v1\_xxreal\_0 k1\_xxreal\_0 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0))) \Rightarrow (\forall X2. (v1\_xxreal\_0 X2) \Rightarrow (((v1\_topdim\_2 X1 X0) \Rightarrow ((X2 = k1\_topdim\_2 X0 X1) \Leftrightarrow ((\forall X3. (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0))) \Rightarrow (((k1\_xxreal\_3 X2 np\_1 \in k1\_card\_1 X3) \wedge (r1\_tarski X3 X1)) \Rightarrow (v1\_xboole\_0 (k6\_setfam\_1 X0 X3)))) \wedge (\exists X3. (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0))) \wedge ((r1\_tarski X3 X1) \wedge ((k1\_card\_1 X3 = k1\_xxreal\_3 X2 np\_1) \wedge (\neg (v1\_xboole\_0 (k6\_setfam\_1 X0 X3)) \wedge (\neg v1\_xboole\_0 X3)))))))) \wedge ((\neg v1\_topdim\_2 X1 X0) \Rightarrow ((X2 = k1\_topdim\_2 X0 X1) \Leftrightarrow (X2 = k1\_xxreal\_0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (5)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_xreal\_0 X0) \quad (6)$$

**Theorem 1**

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X1)))\Rightarrow((r1\_xreal\_0\ (k1\_topdim\_2\ X1\ X2)\ X0)\Rightarrow(v1\_topdim\_2\ X2\ X1)))$$