

l7\_metrizts (TMaZf-  
bSc7D9C1WNtR6LJ1H6WNBq8SLn6nt9)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k2\_waybel23 : \iota \Rightarrow \iota$  be given. Let  $v1\_cantor\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_tops\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $v3\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_card\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1\_pre\_topc X0) \Rightarrow (\forall X1. ((v1\_cantor\_1 X1 X0) \wedge \\ ((v1\_tops\_2 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0)))))) \Rightarrow (r1\_ordinal1 (k2\_waybel23 X0) (k1\_card\_1 \\ X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow \\ & (((r1\_tarSKI\ X1\ (u1\_pre\_topc\ X0)) \wedge (\forall X2.(m1\_subset\_1\ X2 \\ & (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow ((v3\_pre\_topc\ X2\ X0) \Rightarrow (\forall X3. \\ & (m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\neg(X3 \in X2) \wedge (\forall X4.(m1\_subset\_1 \\ & X4\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\neg(X4 \in X1) \wedge ((X3 \in X4) \wedge (r1\_tarSKI \\ & X4\ X2)))))) \Rightarrow ((v1\_tops\_2\ X1\ X0) \wedge ((v1\_cantor\_1\ X1\ X0) \wedge (m1\_subset\_1 \\ & X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.r1\_tarSKI\ k1\_xboole\_0\ X0 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v3\_ordinal1\ X0) \wedge (v3\_ordinal1\ X1)) \Rightarrow (r1\_ordinal1\ X0\ X1) \Leftrightarrow (r1\_tarSKI\ X0\ X1) \quad (7)$$

Assume the following.

$$\forall X0.((v2\_struct\_0\ X0) \wedge (l1\_struct\_0\ X0)) \Rightarrow (v1\_xboole\_0\ (u1\_struct\_0\ X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow ((v1\_xboole\_0\ (k1\_card\_1\ X0)) \wedge (v1\_card\_1\ (k1\_card\_1\ X0))) \quad (9)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (l1\_struct\_0\ X0) \quad (10)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (v1\_card\_1\ (k2\_waybel23\ X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (v1\_xboole\_0\ X1)) \quad (12)$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (v3\_ordinal1\ X0) \quad (13)$$

**Theorem 1**

$$\forall X0.((v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow (v1\_xboole\_0\ (k2\_waybel23\ X0))$$