

## l14\_metric\_2

(TMFh7VVS8cAVRc4YW2AjY5QAekVKPgJVVt9)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v6\_metric\_1 : \iota \Rightarrow o$  be given. Let  $v8\_metric\_1 : \iota \Rightarrow o$  be given. Let  $v9\_metric\_1 : \iota \Rightarrow o$  be given. Let  $l1\_metric\_1 : \iota \Rightarrow o$  be given. Let  $m1\_metric\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_metric\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v6\_metric\_1 X0) \wedge ((v8\_metric\_1 \\ X0) \wedge ((v9\_metric\_1 X0) \wedge (l1\_metric\_1 X0)))))) \Rightarrow (\forall X1. (m1\_subset\_1 \\ X1 (u1\_struct\_0 X0)) \Rightarrow (X1 \in k1\_metric\_2 X0 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_metric\_1 X0)) \Rightarrow (\forall X1. \\ (m1\_metric\_2 X1 X0) \Rightarrow (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ X0)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_metric\_1 X0)) \Rightarrow (\forall X1. \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow ((m1\_metric\_2 \\ X1 X0) \Leftrightarrow (\exists X2. (m1\_subset\_1 X2 (u1\_struct\_0 X0) \wedge (X1 = k1\_metric\_2 \\ X0 X2)))))) \end{aligned} \quad (4)$$

### Theorem 1

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v6\_metric\_1 X0) \wedge ((v8\_metric\_1 \\ X0) \wedge ((v9\_metric\_1 X0) \wedge (l1\_metric\_1 X0)))))) \Rightarrow (\forall X1. (m1\_metric\_2 \\ X1 X0) \Rightarrow (\neg v1\_xboole\_0 X1)) \end{aligned}$$