

# t28\_metric\_2 (TMLZCghn- BCLXJixHV3bBsdNVwnF2Do162Kw)

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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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_metric\_2 : \iota \Rightarrow \iota$  be given. Let  $k8\_metric\_2 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k1\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r4\_metric\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_metric\_1 X0)) \Rightarrow (k8\_metric\_2 \\
 X0 = & \text{ReplSep } (\text{toset } (\lambda X1 : \iota. m1\_subset\_1 X1 (k2\_zfmisc\_1 (k2\_metric\_2 \\
 & X0) (k2\_metric\_2 X0)))) (\lambda X1 : \iota. \exists X2. (m1\_subset\_1 \\
 & X2 (k2\_metric\_2 X0)) \wedge (\exists X3. (m1\_subset\_1 X3 (k2\_metric\_2 \\
 & X0)) \wedge (\exists X4. (m1\_subset\_1 X4 k1\_numbers) \wedge ((X1 = k1\_domain\_1 \\
 & (k2\_metric\_2 X0) (k2\_metric\_2 X0) X2 X3) \wedge (r4\_metric\_2 X0 X2 X3 X4)))))) \\
 & (\lambda X1 : \iota. X1))
 \end{aligned} \tag{1}$$

## Theorem 1

$$\begin{aligned}
 & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v6\_metric\_1 X0) \wedge ((v8\_metric\_1 \\
 & X0) \wedge ((v9\_metric\_1 X0) \wedge (l1\_metric\_1 X0)))))) \Rightarrow (\forall X1. (m1\_subset\_1 \\
 X1 & (k2\_zfmisc\_1 (k2\_metric\_2 X0) (k2\_metric\_2 X0))) \Rightarrow ((X1 \in k8\_metric\_2 \\
 & X0) \Leftrightarrow (\exists X2. (m1\_subset\_1 X2 (k2\_metric\_2 X0)) \wedge (\exists X3. \\
 & (m1\_subset\_1 X3 (k2\_metric\_2 X0)) \wedge (\exists X4. (m1\_subset\_1 X4 \\
 & k1\_numbers) \wedge ((X1 = k1\_domain\_1 (k2\_metric\_2 X0) (k2\_metric\_2 \\
 & X0) X2 X3) \wedge (r4\_metric\_2 X0 X2 X3 X4))))))
 \end{aligned}$$