

t16\_metric\_2 (TMHUE-  
MyC56S7y3JexRJAN2P9maZanBberYb)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_metric\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_metric\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_metric\_2 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2\_struct\_0 X1) \wedge (l1\_metric\_1 X1)) \Rightarrow \\ & ((X0 \in k2\_metric\_2 X1) \Leftrightarrow (\exists X2. (m1\_subset\_1 X2 (u1\_struct\_0 \\ & X1)) \wedge (X0 = k1\_metric\_2 X1 X2))) \end{aligned} \quad (1)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_metric\_1 X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (k1\_metric\_2 X0 X1 \in k2\_metric\_2 \\ & X0)) \end{aligned}$$