

# l3\_metric\_1 (TMdMRWxLdYovbnWAhbhY- accm6BckV7tKZyz)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k5\_binop\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_funct\_5 : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$np\_1 = k1\_tarski\ k1\_xboole\_0 \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

$$\neg v1\_xboole\_0\ np\_1 \tag{3}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{4}$$

Assume the following.

$$(v1\_funct\_1\ k9\_funct\_5) \wedge ((v1\_funct\_2\ k9\_funct\_5\ (k2\_zfmisc\_1\ np\_1\ np\_1)\ np\_1) \wedge (m1\_subset\_1\ k9\_funct\_5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ np\_1\ np\_1)\ np\_1))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ (k2\_zfmisc\_1\ X0\ X0)\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))) \wedge ((m1\_subset\_1\ X2\ X0) \wedge (m1\_subset\_1\ X3\ X0)) \Rightarrow (m1\_subset\_1\ (k5\_binop\_1\ X0\ X1\ X2\ X3)\ X0) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \tag{7}$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1 X0 np\_1) \Rightarrow (\forall X1.(m1\_subset\_1 X1 np\_1) \Rightarrow ((k5\_binop\_1 np\_1 k9\_funct\_5 X0 X1 = k6\_numbers) \Leftrightarrow (X0 = X1)))$$