

# t3\_funcsdm

(TMRyue1qKJLf6aJzrd9rxhx4ECuZzVSxhWR)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k8\_funcsdm : \iota \Rightarrow \iota$  be given. Let  $k9\_funcsdm : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k8\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (X1 \in X0) \Rightarrow (k1\_funct\_1 (k2\_funcop\_1 X0 X2) X1 = X2) \quad (1)$$

Assume the following.

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

Assume the following.

$$m1\_subset\_1 \ k1\_xboole\_0 \ k4\_ordinal1 \quad (3)$$

Assume the following.

$$((v2\_xxreal\_0 \ np\_1) \wedge (m2\_subset\_1 \ np\_1 \ k1\_numbers \ k5\_numbers)) \wedge ((m1\_subset\_1 \ np\_1 \ k5\_numbers) \wedge (m1\_subset\_1 \ np\_1 \ k1\_numbers)) \quad (4)$$

Assume the following.

$$\neg v1\_xboole\_0 \ np\_1 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0 \ X0) \wedge (m1\_subset\_1 X2 \ X0)) \Rightarrow (k8\_funcop\_1 \ X0 \ X1 \ X2 = k2\_funcop\_1 \ X1 \ X2) \quad (6)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (7)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (8)$$

Assume the following.

$$(\neg v1\_xboole\_0 \ k4\_ordinal1) \wedge (v3\_ordinal1 \ k4\_ordinal1) \quad (9)$$

Assume the following.

$$v1\_xboole\_0 \ k1\_xboole\_0 \quad (10)$$

Assume the following.

$$\forall X0. \exists X1. m1\_subset\_1 \ X1 \ X0 \quad (11)$$

Assume the following.

$$\forall X0. k9\_funcsdom \ X0 = k8\_funcop\_1 \ k5\_numbers \ X0 \ np\_1 \quad (12)$$

Assume the following.

$$\forall X0. k8\_funcsdom \ X0 = k8\_funcop\_1 \ k5\_numbers \ X0 \ k6\_numbers \quad (13)$$

Assume the following.

$$\forall X0. \forall X1. k2\_funcop\_1 \ X0 \ X1 = k2\_zfmisc\_1 \ X0 \ (k1\_tarski \ X1) \quad (14)$$

**Theorem 1**  $\forall X0. (\neg v1\_xboole\_0 \ X0) \Rightarrow (k8\_funcsdom \ X0 \neq k9\_funcsdom \ X0)$ .