

t1\_funcop\_1  
(TMFk8QBT5FuZa2MuzPpekbc8yDLUndbCkab)

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Let  $k12\_funct\_3 : \iota \Rightarrow \iota$  be given. Let  $k13\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_partfun1 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k11\_funct\_3 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (k1\_funct\_1 (k4\_relat\_1 X1) X0 = X0) \quad (1)$$

Assume the following.

$$\forall X0. k6\_partfun1 X0 = k4\_relat\_1 X0 \quad (2)$$

Assume the following.

$$\forall X0. k12\_funct\_3 X0 = k11\_funct\_3 X0 \quad (3)$$

Assume the following.

$$\forall X0. k9\_xtuple\_0 (k4\_relat\_1 X0) = X0 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k3\_xboole\_0 X0 X0 = X0 \quad (5)$$

Assume the following.

$$\forall X0. (v1\_relat\_1 (k4\_relat\_1 X0)) \wedge (v1\_funct\_1 (k4\_relat\_1 X0)) \quad (6)$$

Assume the following.

$$\forall X0. v1\_relat\_1 (k4\_relat\_1 X0) \quad (7)$$

Assume the following.

$$\forall X0.(v1\_funct\_1 (k12\_funct\_3 X0) \wedge ((v1\_funct\_2 (k12\_funct\_3 X0) X0) (k2\_zfmisc\_1 X0 X0)) \wedge (m1\_subset\_1 (k12\_funct\_3 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 (k2\_zfmisc\_1 X0 X0))))) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 (k11\_funct\_3 X0) \wedge (v1\_funct\_1 (k11\_funct\_3 X0))) \quad (9)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1.((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow (\forall X2.((v1\_relat\_1 X2) \wedge (v1\_funct\_1 X2)) \Rightarrow ((X2 = k13\_funct\_3 X0 X1) \Leftrightarrow ((k9\_xtuple\_0 X2 = k3\_xboole\_0 (k9\_xtuple\_0 X0) (k9\_xtuple\_0 X1)) \wedge (\forall X3.(X3 \in k9\_xtuple\_0 X2) \Rightarrow (k1\_funct\_1 X2 X3 = k4\_tarski (k1\_funct\_1 X0 X3) (k1\_funct\_1 X1 X3))))))) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow ((X1 = k11\_funct\_3 X0) \Leftrightarrow ((k9\_xtuple\_0 X1 = X0) \wedge (\forall X2.(X2 \in X0) \Rightarrow (k1\_funct\_1 X1 X2 = k4\_tarski X2 X2)))) \quad (11)$$

**Theorem 1**

$$\forall X0.k12\_funct\_3 X0 = k13\_funct\_3 (k6\_partfun1 X0) (k6\_partfun1 X0)$$