

# l7\_group\_9 (TM- cSC37e8BU7qnkbY5jbqgDcCNvRoyDuVXN)

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Let  $v1\_funct.1 : \iota \Rightarrow o$  be given. Let  $k2\_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k6\_partfun1 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc.1 : \iota \Rightarrow \iota$  be given. Let  $k2\_funcop.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_funct.7 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole.0 : \iota$  be given. Let  $k4\_relat.1 : \iota \Rightarrow \iota$  be given. Let  $k4\_card.3 : \iota \Rightarrow \iota$  be given. Let  $k7\_funcop.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(X2 \in X1) \Rightarrow ((v1\_funct.1 (k2\_funcop.1 \\ & X0 X2)) \wedge ((v1\_funct.2 (k2\_funcop.1 X0 X2) X0 X1) \wedge (m1\_subset.1 ( \\ & k2\_funcop.1 X0 X2) (k1\_zfmisc.1 (k2\_zfmisc.1 X0 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.k4\_funct.7 X0 k1\_xboole.0 = k6\_partfun1 X0 \quad (2)$$

Assume the following.

$$\forall X0.k4\_relat.1 X0 \in k1\_funct.2 X0 X0 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.k1\_funct.2 X0 X1 = k4\_card.3 (k7\_funcop.1 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.k7\_funcop.1 X0 X1 = k2\_funcop.1 X0 X1 \quad (5)$$

Assume the following.

$$\forall X0.k6\_partfun1 X0 = k4\_relat.1 X0 \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(v1\_funct.1 (k7\_funcop.1 X0 X1)) \wedge ((v1\_funct.2 \\ & (k7\_funcop.1 X0 X1) X0 (k1\_tarski X1)) \wedge (m1\_subset.1 (k7\_funcop.1 \\ & X0 X1) (k1\_zfmisc.1 (k2\_zfmisc.1 X0 (k1\_tarski X1)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k2\_funcop\_1 X0 X1 = k2\_zfmisc\_1 X0 (k1\_tarski X1) \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.\forall X1.(v1\_funct\_1 (k2\_zfmisc\_1 X0 (k1\_tarski \\ & (k6\_partfun1 X1)))) \wedge ((v1\_funct\_2 (k2\_zfmisc\_1 X0 (k1\_tarski \\ & (k6\_partfun1 X1))) X0 (k1\_funct\_2 X1 X1)) \wedge (m1\_subset\_1 (k2\_zfmisc\_1 \\ & X0 (k1\_tarski (k6\_partfun1 X1))) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 \\ & (k1\_funct\_2 X1 X1)))))) \end{aligned}$$