

# t17\_partfun1 (TMR- LzpzTa4aBRk6mPotSQVmmNmedwCnXXoHo)

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Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $v2\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1\_funct\_1 X2) \wedge (m1\_subset\_1 \\ & \quad X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow ((\forall X3. (m1\_subset\_1 \\ & \quad X3 X0) \Rightarrow (\forall X4. (m1\_subset\_1 X4 X0) \Rightarrow (((X3 \in k1\_relset\_1 X0 X2) \wedge \\ & \quad ((X4 \in k1\_relset\_1 X0 X2) \wedge (k1\_funct\_1 X2 X3 = k1\_funct\_1 X2 X4))) \Rightarrow \\ & \quad (X3 = X4)))) \Rightarrow (v2\_funct\_1 X2)) \end{aligned} \tag{1}$$

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.

$$\forall X0. \neg v1\_xboole\_0 (k1\_tarski X0) \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \tag{4}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1\_funct\_1 X2) \wedge (m1\_subset\_1 \\ & \quad X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k1\_tarski X0) X1)))) \Rightarrow (v2\_funct\_1 \\ & \quad X2) \end{aligned}$$