

t47\_partfun1  
(TMSPTaGfR7bc7scftbinjGaZoTi89KWdFpy)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 \in k4\_partfun1\ X0\ X1) \Rightarrow ((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \neg v1\_xboole\_0\ (k4\_partfun1\ X0\ X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0\ X0) \Rightarrow ((m1\_subset\_1\ X1\ X0) \Leftrightarrow (X1 \in X0))) \wedge ((v1\_xboole\_0\ X0) \Rightarrow ((m1\_subset\_1\ X1\ X0) \Leftrightarrow (v1\_xboole\_0\ X1))) \quad (3)$$

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. (m1\_subset\_1\ X2\ (k4\_partfun1\ X0\ X1)) \Rightarrow ((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))$$