

t2\_pzfmisc1  
(TMS8hVtcNAzgCTvH8DeuRNeP1swbqA3wSCM)

October 27, 2020

Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. ((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k1\_xboole\_0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_partfun1 X0 k1\_xboole\_0)))) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\forall X0. \exists X1. (v1\_relat\_1 X1) \wedge ((v4\_relat\_1 X1 X0) \wedge ((v1\_funct\_1 X1) \wedge (v1\_partfun1 X1 X0))) \quad (2)$$

**Theorem 1**

$$\forall X0. ((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow ((X0 = k1\_xboole\_0) \Rightarrow ((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k1\_xboole\_0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_partfun1 X0 k1\_xboole\_0)))))$$