

t4\_partfun1  
(TMJHcmR6aRLha8WR2qRGCAC2mCRGxU694Gi)

October 27, 2020

Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge ((v5\_relat\_1 X1 X0) \wedge (v1\_funct\_1 X1))) \Rightarrow (\forall X2. (X2 \in k9\_xtuple\_0 X1) \Rightarrow (k1\_funct\_1 X1 X2 \in X0)) \quad (1)$$

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. ((v1\_relat\_1 X2) \wedge ((v5\_relat\_1 X2 X0) \wedge (v1\_funct\_1 X2))) \Rightarrow ((X1 \in k9\_xtuple\_0 X2) \Rightarrow (k1\_funct\_1 X2 X1 \in X0))$$