

t1\_topalg\_1  
(TMH4vxnmYdAvsTRBdo52riN1LdendC2iB6L)

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Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  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  $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_partfun1 : \iota \Rightarrow \iota$  be given. Let  $v3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 \\ & X2 X0 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow \\ & (\forall X3. ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 X1 X0) \wedge (m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 X0)))) \Rightarrow ((r2\_relset\_1 X0 X0 (k1\_partfun1 \\ & X0 X1 X1 X0 X2 X3) (k6\_partfun1 X0)) \Rightarrow ((v2\_funct\_1 X2) \wedge (v2\_funct\_2 \\ & X3 X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1))) \Rightarrow (((v1\_funct\_1 X2) \wedge ((v2\_funct\_1 X2) \wedge (v2\_funct\_2 \\ & X2 X1))) \Rightarrow ((v1\_funct\_1 X2) \wedge (v3\_funct\_2 X2 X0 X1))) \end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 \\ & X2 X0 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow \\ & (\forall X3. ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 X1 X0) \wedge (m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 X0)))) \Rightarrow (((r2\_relset\_1 X0 X0 ( \\ & k1\_partfun1 X0 X1 X1 X0 X2 X3) (k6\_partfun1 X0)) \wedge (r2\_relset\_1 X1 \\ & X1 (k1\_partfun1 X1 X0 X0 X1 X3 X2) (k6\_partfun1 X1))) \Rightarrow (v3\_funct\_2 \\ & X3 X1 X0))) \end{aligned}$$