

# t77\_funct\_3 (TMZGtoNcKiDxsu- CACdW2CXovhjrLytnKaHM)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. 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  $k16\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k13\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v1\_funct\_1 \\ & X4) \wedge ((v1\_funct\_2 X4 X0 X1) \wedge (m1\_subset\_1 X4 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X1)))) \Rightarrow (\forall X5. ((v1\_funct\_1 X5) \wedge ((v1\_funct\_2 X5 X2 X3) \wedge \\ & (m1\_subset\_1 X5 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X2 X3)))) \Rightarrow (\neg((X1 = \\ & k1\_xboole\_0) \Rightarrow (X0 = k1\_xboole\_0)) \wedge (((X3 = k1\_xboole\_0) \Rightarrow (X2 = k1\_xboole\_0)) \wedge \\ & (k16\_funct\_3 X0 X2 X1 X3 X4 X5 \neq k13\_funct\_3 (k3\_relat\_1 (k9\_funct\_3 \\ & X0 X2) X4) (k3\_relat\_1 (k10\_funct\_3 X0 X2) X5)))))) \end{aligned} \quad (1)$$

Assume the following.

$$v1\_xboole\_0 \ k1\_xboole\_0 \quad (2)$$

## Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (\neg v1\_xboole\_0 X2) \Rightarrow (\forall X3. \\ & (\neg v1\_xboole\_0 X3) \Rightarrow (\forall X4. ((v1\_funct\_1 X4) \wedge ((v1\_funct\_2 \\ & X4 X0 X2) \wedge (m1\_subset\_1 X4 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X2)))) \Rightarrow \\ & (\forall X5. ((v1\_funct\_1 X5) \wedge ((v1\_funct\_2 X5 X1 X3) \wedge (m1\_subset\_1 \\ & X5 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 X3)))) \Rightarrow (k16\_funct\_3 X0 X1 X2 X3 \\ & X4 X5 = k13\_funct\_3 (k3\_relat\_1 (k9\_funct\_3 X0 X1) X4) (k3\_relat\_1 \\ & (k10\_funct\_3 X0 X1) X5)))))) \end{aligned}$$