

t75\_zf\_lang1 (TMM-  
Megh6aJnTQ6Wo8SdWpoUfGrVNirCChBS)

October 27, 2020

Let  $v1\_zf\_lang : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. 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  $k1\_zf\_lang : \iota$  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  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zf\_model : \iota \Rightarrow \iota$  be given. Let  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_zf\_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((v1\_zf\_lang X1) \wedge ( \\ & \quad m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow (\forall X2. ((v1\_funct\_1 X2) \wedge (( \\ & \quad v1\_funct\_2 X2 k1\_zf\_lang X0) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & \quad k1\_zf\_lang X0)))))) \Rightarrow (\forall X3. ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 \\ & \quad X3 k1\_zf\_lang X0) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_zf\_lang \\ & \quad X0)))))) \Rightarrow (((\forall X4. (m2\_subset\_1 X4 k5\_numbers k1\_zf\_lang) \Rightarrow \\ & \quad (\neg (k3\_funct\_2 k1\_zf\_lang X0 X2 X4 \neq k3\_funct\_2 k1\_zf\_lang X0 X3 X4) \wedge \\ & \quad (X4 \in k2\_zf\_model X1))) \wedge (r1\_zf\_model X0 X2 X1)) \Rightarrow (r1\_zf\_model X0 \\ & \quad X3 X1)))))) \end{aligned} \tag{1}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (\forall X1. \\ & \quad (\neg v1\_xboole\_0 X1) \Rightarrow (\forall X2. ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 \\ & \quad X2 k1\_zf\_lang X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_zf\_lang \\ & \quad X1)))))) \Rightarrow (\forall X3. ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 k1\_zf\_lang \\ & \quad X1) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_zf\_lang X1)))))) \Rightarrow \\ & \quad (((\forall X4. (m2\_subset\_1 X4 k5\_numbers k1\_zf\_lang) \Rightarrow ((X4 \in k2\_zf\_model \\ & \quad X0) \Rightarrow (k3\_funct\_2 k1\_zf\_lang X1 X3 X4 = k3\_funct\_2 k1\_zf\_lang X1 X2 \\ & \quad X4))) \wedge (r1\_zf\_model X1 X2 X0)) \Rightarrow (r1\_zf\_model X1 X3 X0)))))) \end{aligned}$$