

t85\_zf\_lang1  
(TMdgg312A7f1FGguscEAVKXx1Bu5engifuS)

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  $v3\_zf\_lang : \iota \Rightarrow o$  be given. Let  $r1\_zf\_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k18\_zf\_lang : \iota \Rightarrow \iota$  be given. Let  $k19\_zf\_lang : \iota \Rightarrow \iota$  be given. Let  $k5\_zf\_model : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (\forall X1. \\ (\neg v1\_xboole\_0 X1) \Rightarrow ((v3\_zf\_lang X0) \Rightarrow (\forall X2.((v1\_funct\_1 \\ X2) \wedge ((v1\_funct\_2 X2 k1\_zf\_lang X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ (k2\_zfmisc\_1 k1\_zf\_lang X1)))))) \Rightarrow ((k3\_funct\_2 k1\_zf\_lang X1 X2 \\ (k18\_zf\_lang X0) \in k3\_funct\_2 k1\_zf\_lang X1 X2 (k19\_zf\_lang X0)) \Leftrightarrow \\ (X2 \in k5\_zf\_model X0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.((v1\_funct\_1 X1) \wedge ( \\ (v1\_funct\_2 X1 k1\_zf\_lang X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ k1\_zf\_lang X0)))))) \Rightarrow (\forall X2.((v1\_zf\_lang X2) \wedge (m2\_finseq\_1 \\ X2 k5\_numbers)) \Rightarrow ((r1\_zf\_model X0 X1 X2) \Leftrightarrow (X1 \in k5\_zf\_model X2 X0)))) \end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (\forall X1. \\ (\neg v1\_xboole\_0 X1) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 \\ X2 k1\_zf\_lang X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_zf\_lang \\ X1)))))) \Rightarrow ((v3\_zf\_lang X0) \Rightarrow ((r1\_zf\_model X1 X2 X0) \Leftrightarrow (k3\_funct\_2 \\ k1\_zf\_lang X1 X2 (k18\_zf\_lang X0) \in k3\_funct\_2 k1\_zf\_lang X1 X2 ( \\ k19\_zf\_lang X0)))))) \end{aligned}$$