

t7\_zf\_model (TMH-  
BQsaoj6UR4SUfDyABmwFRH3wWyKqbV5K)

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  $v2\_zf\_lang : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow o$  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  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  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. Let  $k4\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ((v2\_zf\_lang X0) \Rightarrow (X0 = k4\_zf\_lang (k18\_zf\_lang X0) (k19\_zf\_lang X0))) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m2\_subset\_1 X1 k5\_numbers \\ & k1\_zf\_lang) \Rightarrow (\forall X2.(m2\_subset\_1 X2 k5\_numbers k1\_zf\_lang) \Rightarrow \\ & (\forall X3.((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 k1\_zf\_lang X0) \wedge \\ & (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_zf\_lang X0)))))) \Rightarrow \\ & ((k3\_funct\_2 k1\_zf\_lang X0 X3 X1 = k3\_funct\_2 k1\_zf\_lang X0 X3 X2) \Leftrightarrow \\ & (X3 \in k5\_zf\_model (k4\_zf\_lang X1 X2) X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (3)$$

Assume the following.

$$\forall X0.((v1\_zf\_lang X0) \wedge (m1\_finseq\_1 X0 k5\_numbers)) \Rightarrow (m2\_subset\_1 (k19\_zf\_lang X0) k5\_numbers k1\_zf\_lang) \quad (4)$$

Assume the following.

$$\forall X0.((v1\_zf\_lang X0) \wedge (m1\_finseq\_1 X0 k5\_numbers)) \Rightarrow (m2\_subset\_1 (k18\_zf\_lang X0) k5\_numbers k1\_zf\_lang) \quad (5)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (\forall X1. \\ & (\neg v1\_xboole\_0 X1) \Rightarrow ((v2\_zf\_lang X0) \Rightarrow (\forall X2.((v1\_funct\_1 \\ & X2) \wedge ((v1\_funct\_2 X2 k1\_zf\_lang X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k1\_zf\_lang X1)))))) \Rightarrow ((k3\_funct\_2 k1\_zf\_lang X1 X2 \\ & (k18\_zf\_lang X0) = k3\_funct\_2 k1\_zf\_lang X1 X2 (k19\_zf\_lang X0)) \Leftrightarrow \\ & (X2 \in k5\_zf\_model X0 X1)))))) \end{aligned}$$