

## t10\_zfmodel1

(TMQKknkhk3YfQdNmNkjoobhKV1gBPdSWD818)

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Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k1\_zf\_lang : \iota$  be given. Let  $v1\_zf\_lang : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_zf\_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zf\_model : \iota \Rightarrow \iota$  be given. Let  $k8\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow o. (\forall X1. (v7\_ordinal1 X1) \Rightarrow ((\forall X2. \\ & (v7\_ordinal1 X2) \Rightarrow ((\neg r1\_xxreal\_0 X1 X2) \Rightarrow (X0 X2))) \Rightarrow (X0 X1))) \Rightarrow ( \\ & \quad \forall X1. (v7\_ordinal1 X1) \Rightarrow (X0 X1)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 \\ & \quad X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \end{aligned} \tag{2}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v7\_ordinal1\ X0) \Rightarrow ((\forall X1.(v7\_ordinal1\ X1) \Rightarrow ( \\
& (\neg r1\_xreal\_0\ X0\ X1) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ k5\_numbers\ k1\_zf\_lang) \Rightarrow \\
& (\forall X3.(\neg v1\_xboole\_0\ X3) \Rightarrow (\forall X4.((v1\_zf\_lang\ X4) \wedge \\
& (m2\_finseq\_1\ X4\ k5\_numbers)) \Rightarrow (\forall X5.((v1\_funct\_1\ X5) \wedge ( \\
& (v1\_funct\_2\ X5\ k1\_zf\_lang\ X3) \wedge (m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1 \\
& k1\_zf\_lang\ X3)))))) \Rightarrow (((k3\_finseq\_1\ X4 = X1) \wedge (r1\_zf\_model\ X3\ X5 \\
& X4)) \Rightarrow ((X2 \in k2\_zf\_model\ X4) \vee (r1\_zf\_model\ X3\ X5\ (k8\_zf\_lang\ X2\ X4)))))) \Rightarrow \\
& (\forall X1.(m2\_subset\_1\ X1\ k5\_numbers\ k1\_zf\_lang) \Rightarrow (\forall X2. \\
& (\neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3.((v1\_zf\_lang\ X3) \wedge (m2\_finseq\_1 \\
& X3\ k5\_numbers)) \Rightarrow (\forall X4.((v1\_funct\_1\ X4) \wedge ((v1\_funct\_2\ X4 \\
& k1\_zf\_lang\ X2) \wedge (m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang \\
& X2)))))) \Rightarrow (((k3\_finseq\_1\ X3 = X0) \wedge (r1\_zf\_model\ X2\ X4\ X3)) \Rightarrow ((X1 \in \\
& k2\_zf\_model\ X3) \vee (r1\_zf\_model\ X2\ X4\ (k8\_zf\_lang\ X1\ X3))))))))) \\
& \tag{4}
\end{aligned}$$

Assume the following.

$$v6\_membered\ k4\_ordinal1 \tag{5}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_zf\_lang \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Rightarrow ((v1\_funct\_1\ X1) \wedge ( \\
& (v1\_finseq\_1\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers \\
& X0)))))) \\
& \tag{7}
\end{aligned}$$

Assume the following.

$$m1\_subset\_1\ k5\_numbers\ (k1\_zfmisc\_1\ k1\_numbers) \tag{8}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow \\
& (m2\_subset\_1\ (k3\_finseq\_1\ X0)\ k1\_numbers\ k5\_numbers) \\
& \tag{9}
\end{aligned}$$

Assume the following.

$$m1\_subset\_1\ k1\_zf\_lang\ (k1\_zfmisc\_1\ k5\_numbers) \tag{10}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\
& X0)) \Rightarrow (v1\_xboole\_0\ X1)) \\
& \tag{11}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1 \\
& (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (v1\_relat\_1\ X2) \\
& \tag{12}
\end{aligned}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (v7\_ordinal1\ X1)) \quad (13)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m2\_subset\_1\ X0\ k5\_numbers\ k1\_zf\_lang) \Rightarrow (\forall X1. \\ & ((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow (\forall X2.( \\ & \neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3.((v1\_funct\_1\ X3) \wedge ((v1\_funct\_2 \\ & X3\ k1\_zf\_lang\ X2) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang \\ & X2)))))) \Rightarrow ((r1\_zf\_model\ X2\ X3\ X1) \Rightarrow ((X0 \in k2\_zf\_model\ X1) \vee (r1\_zf\_model \\ & X2\ X3\ (k8\_zf\_lang\ X0\ X1)))))) \end{aligned}$$