

t1_bintree2

(TMT8Num6yLwyvUn75m42RcFVLCnrV716xyY)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k13_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.\forall X2.(m2_finseq_1 \\ X2\ X1) \Rightarrow (m2_finseq_1\ (k2_partfun1\ k5_numbers\ X1\ X2\ (k2_finseq_1 \\ X0))\ X1)) \end{aligned} \tag{1}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{2}$$

Assume the following.

$$\forall X0.k3_finseq_2\ X0 = k13_finseq_1\ X0 \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.\forall X3.((v1_funct_1\ X2) \wedge \\ (m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))) \Rightarrow (k2_partfun1 \\ X0\ X1\ X2\ X3 = k5_relat_1\ X2\ X3) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m2_finseq_1\ X1\ X0) \Rightarrow ((v1_funct_1\ X1) \wedge \\ (v1_finseq_1\ X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers \\ X0)))) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(X1 = k13_finseq_1\ X0) \Leftrightarrow (\forall X2.(X2 \in \\ X1) \Leftrightarrow (m2_finseq_1\ X2\ X0)) \end{aligned} \tag{6}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ X1))) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow ((X1 \in k3_finseq_2 \\ X0) \Rightarrow (k5_relat_1 X1 (k2_finseq_1 X2) \in k3_finseq_2 X0))) \end{aligned}$$