

t28_valued_0
(TMWXU92RH3nDg2S11cj8Xoi5cTwmehf4vBF)

October 27, 2020

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 $k5_numbers : \iota$ 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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k8_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(\neg v1_xboole_0\ X1) \Rightarrow (\\ \forall X2.((v1_funct_1\ X2) \wedge ((v1_funct_2\ X2\ k5_numbers\ X1) \wedge (\\ m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ X1)))))) \Rightarrow \\ (k8_nat_1\ X1\ X2\ X0 \in k10_xtuple_0\ X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1\ X1) \wedge (v5_relat_1\ X1\ X0)) \Rightarrow (\\ k2_relset_1\ X0\ X1 = k10_xtuple_0\ X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1 \\ (k2_zfmisc_1\ X0\ X1))) \Rightarrow ((v4_relat_1\ X2\ X0) \wedge (v5_relat_1\ X2\ X1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1 \\ (k2_zfmisc_1\ X0\ X1))) \Rightarrow (v1_relat_1\ X2) \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0.(\neg v1_xboole_0\ X0) \Rightarrow (\forall X1.((v1_funct_1\ X1) \wedge (\\ (v1_funct_2\ X1\ k5_numbers\ X0) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ k5_numbers\ X0)))))) \Rightarrow (\forall X2.(v7_ordinal1\ X2) \Rightarrow (k8_nat_1\ X0 \\ X1\ X2 \in k2_relset_1\ X0\ X1))) \end{aligned}$$