

t34_descip_1

(TMZyXDdsxxnn3HwQkSJPVvfBy6SNfxPHicV)

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Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_descip_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k16_descip_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1_xreal_0 X1 X0))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0) \wedge \\ & (((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))))) \wedge (m1_subset_1 X3 X0))) \Rightarrow (k3_funct_2 X0 \\ & X1 X2 X3 = k1_funct_1 X2 X3) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k2_finseq_1 X0 = k1_finseq_1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(((v7_ordinal1 X0) \wedge (\neg v1_xboole_0 X0)) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k16_descip_1 X0 X1 = k1_ordinal1 X1) \quad (5)$$

Assume the following.

$$\forall X0.((v7_ordinal1 X0) \wedge (\neg v1_xboole_0 X0)) \Rightarrow (\neg v1_xboole_0 (k1_finseq_1 X0)) \quad (6)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v7_ordinal1 \ X0) \wedge (\neg v1_xboole_0 \ X0)) \Rightarrow (\forall X1. \\ & ((v1_funct_1 \ X1) \wedge ((v1_funct_2 \ X1 \ X0 \ (k2_finseq_1 \ X0)) \wedge (m1_subset_1 \\ & X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ (k2_finseq_1 \ X0)))))) \Rightarrow ((v1_descip_1 \\ & X1 \ X0) \Leftrightarrow (\forall X2.(m1_subset_1 \ X2 \ X0) \Rightarrow (k3_funct_2 \ X0 \ (k2_finseq_1 \\ & X0) \ X1 \ X2 = k16_descip_1 \ X0 \ X2)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (k1_ordinal1 \ X0 = k1_nat_1 \ X0 \ np_1) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1 \ X2 \ (k1_zfmisc_1 \\ & (k2_zfmisc_1 \ X0 \ X1))) \Rightarrow (((X1 \neq k1_xboole_0) \Rightarrow ((v1_funct_2 \ X2 \ X0 \\ & X1) \Leftrightarrow (X0 = k1_relset_1 \ X0 \ X2))) \wedge ((X1 = k1_xboole_0) \Rightarrow ((v1_funct_2 \\ & X2 \ X0 \ X1) \Leftrightarrow (X2 = k1_xboole_0)))) \end{aligned} \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v7_ordinal1 \ X0) \wedge (\neg v1_xboole_0 \ X0)) \Rightarrow (\forall X1. \\ & ((v1_funct_1 \ X1) \wedge ((v1_funct_2 \ X1 \ X0 \ (k2_finseq_1 \ X0)) \wedge ((v1_descip_1 \\ & X1 \ X0) \wedge (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ (k2_finseq_1 \\ & X0)))))) \Rightarrow (\forall X2.(v7_ordinal1 \ X2) \Rightarrow ((\neg r1_xxreal_0 \ X0 \ X2) \Rightarrow \\ & ((k1_funct_1 \ X1 \ X2 = k1_nat_1 \ X2 \ np_1) \wedge (X2 \in k1_relset_1 \ X0 \ X1)))))) \end{aligned}$$