

t6_aofa_000
(TMG2ds2uNDJ1KYgU1nsc2V5hy6TRYRLdiSq)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k5_aofa_000 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k6_partfun1 : \iota \Rightarrow \iota$ be given. Let $k1_relat_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k4_relat_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (k9_funct_7 X0 \ k6_numbers = k6_partfun1 (k1_relat_1 X0)) \quad (1)$$

Assume the following.

$$m1_subset_1 \ k1_xboole_0 \ k4_ordinal1 \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X1 = k4_relat_1 X0) \Leftrightarrow ((k9_xtuple_0 X1 = X0) \wedge (\forall X2.(X2 \in X0) \Rightarrow (k1_funct_1 X1 \ X2 = X2)))) \quad (3)$$

Assume the following.

$$\forall X0.k6_partfun1 \ X0 = k4_relat_1 \ X0 \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.k9_xtuple_0 (k4_relat_1 X0) = X0 \quad (7)$$

Assume the following.

$$\forall X0.(v1_relat_1 (k4_relat_1 X0)) \wedge (v1_funct_1 (k4_relat_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.v1_relat_1 (k4_relat_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (k1_relat_1 X0 = k2_xboole_0 (k9_xtuple_0 X0) (k10_xtuple_0 X0)) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.k5_aofa_000 \\ X0 X1 = ReplSep (toset (\lambda X2 : \iota.m1_subset_1 X2 k5_numbers)) \\ (\lambda X2 : \iota.X1 \in k9_xtuple_0 (k9_funct_7 X0 X2)) (\lambda X2 : \iota. \\ k1_funct_1 (k9_funct_7 X0 X2) X1)) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. \\ (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \quad (12)$$

Theorem 1

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.(X1 \in \\ k9_xtuple_0 X0) \Rightarrow (X1 \in k5_aofa_000 X0 X1))$$