

t1_dynkin (TMPtmYLWZRrwSm- RyagS3f7JwzpB2DNuVKEJ)

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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 $k9_setfam_1 : \iota \Rightarrow \iota$ 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 $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k8_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ 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.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ X2))) \Rightarrow (m1_subset_1\ X0\ X2) \quad (2)$$

Assume the following.

$$\forall X0.k9_setfam_1\ X0 = k1_zfmisc_1\ X0 \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(((v1_funct_1\ X1) \wedge ((v1_funct_2 \\ X1\ k5_numbers\ X0) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers \\ X0)))))) \wedge (v7_ordinal1\ X2)) \Rightarrow (k8_nat_1\ X0\ X1\ X2 = k1_funct_1\ X1\ X2) \end{aligned} \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v4_relat_1 X1 X0))\Rightarrow(k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (6)$$

Assume the following.

$$\forall X0.\neg v1_xboole_0 (k1_zfmisc_1 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v4_relat_1 X1 X0))\Rightarrow(m1_subset_1 (k1_relset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge(v1_funct_1 X0))\Rightarrow(\forall X1.(X1 = k10_xtuple_0 X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(\exists X3.(X3 \in k9_xtuple_0 X0)\wedge(X2 = k1_funct_1 X0 X3)))) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (12)$$

Theorem 1

$$\forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0))))))\Rightarrow(\forall X2.(X2 \in k10_xtuple_0 X1)\Leftrightarrow(\exists X3.(m1_subset_1 X3 k5_numbers)\wedge(k8_nat_1 (k9_setfam_1 X0) X1 X3 = X2))))$$