

t15_stirl2_1
(TMSQ2tT4VueGMyARFYtBmz5oAr9LWaDsbuz)

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Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v2_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_stirl2_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_nat_1 : \iota \Rightarrow \iota$ be given. Let $k1_stirl2_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_seq_4 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (k2_relset_1 X0 X1 = k10_xtuple_0 X1) \quad (4)$$

Assume the following.

$$\forall X0. \exists X1. (v1_relat_1 X1) \wedge ((v5_relat_1 X1 X0) \wedge ((v5_ordinal1 X1) \wedge ((v1_funct_1 X1) \wedge ((v1_xboole_0 X1) \wedge (v1_finset_1 X1)))))) \quad (5)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_xboole_0 (k10_xtuple_0 X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (v2_funct_2 X1 X0) \Leftrightarrow (k2_relset_1 X0 X1 = X0) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))))) \Rightarrow ((v1_stirl2_1 X2 X0 X1) \Leftrightarrow (((X0 = k6_numbers) \Rightarrow \\ & (X1 = k6_numbers)) \wedge ((X1 = k6_numbers) \Rightarrow (X0 = k6_numbers)) \wedge (\forall X3. \\ & (v7_ordinal1 X3) \Rightarrow (\forall X4.(v7_ordinal1 X4) \Rightarrow (\neg(X3 \in k2_relset_1 \\ & X1 X2) \wedge ((X4 \in k2_relset_1 X1 X2) \wedge (\neg r1_xxreal_0 X4 X3) \wedge (r1_xxreal_0 \\ & (k5_nat_1 (k1_stirl2_1 X0 X1 X2 (k1_seq_4 X4))) (k5_nat_1 (k1_stirl2_1 \\ & X0 X1 X2 (k1_seq_4 X3)))))))))))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(v1_xboole_0 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_xboole_0 X2)) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))))) \Rightarrow (((X0 = k6_numbers) \wedge (X1 = k6_numbers)) \Rightarrow \\ & ((v2_funct_2 X2 X1) \wedge (v1_stirl2_1 X2 X0 X1)))) \end{aligned}$$