

t5_stirl2_1

(TMZCUZhz8ZExL141hD6org3bZVw6QsEXqsM)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k5_nat_1 : \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_seq_4 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k5_numbers))) \Rightarrow (k6_seq_4 X0 = k5_nat_1 X0) \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \tag{2}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{3}$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \tag{4}$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_tarski X0) \tag{5}$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \tag{6}$$

Assume the following.

$$\forall X0. m2_subset_1 (k5_nat_1 X0) k1_numbers k5_numbers \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m2_subset_1\ X1\ k1_numbers\ k5_numbers) \Rightarrow \\ & (((\neg v1_xboole_0\ X0) \wedge (m1_subset_1\ X0\ (k1_zfmisc_1\ k5_numbers))) \Rightarrow \\ & ((X1 = k5_nat_1\ X0) \Leftrightarrow ((X1 \in X0) \wedge (\forall X2.(v7_ordinal1\ X2) \Rightarrow ((\\ & X2 \in X0) \Rightarrow (r1_xxreal_0\ X1\ X2)))))) \wedge ((\neg(\neg v1_xboole_0\ X0) \wedge (m1_subset_1 \\ & X0\ (k1_zfmisc_1\ k5_numbers))) \Rightarrow ((X1 = k5_nat_1\ X0) \Leftrightarrow (X1 = k6_numbers)))) \quad (9) \end{aligned}$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ k5_numbers) \Rightarrow ((k5_nat_1\ (k6_domain_1\ k5_numbers\ X0) = X0) \wedge (k6_seq_4\ (k6_domain_1\ k5_numbers\ X0) = X0))$$