

t38_moebius1

(TMdY6P2PW4fgjg6CMAwngRHM9o7wEBDFMUB)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_moebius1 : \iota$ be given. Let $k2_moebius1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_moebius1 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k2_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $k1_polynom2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_newton : \iota$ be given. Let $k13_nat_3 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\neg(\neg v1_moebius1 X0) \wedge (k2_moebius1 X0 = k6_numbers)) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xreal_0 (k2_moebius1 X0)) \quad (2)$$

Assume the following.

$$m1_subset_1 k1_moebius1 (k1_zfmisc_1 k5_numbers) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (((\\ v1_moebius1 X0) \Rightarrow ((X1 = k2_moebius1 X0) \Leftrightarrow (X1 = k6_numbers))) \wedge ((\\ \neg v1_moebius1 X0) \Rightarrow ((X1 = k2_moebius1 X0) \Leftrightarrow (\exists X2.((\neg v1_xboole_0 \\ X2) \wedge (v7_ordinal1 X2)) \wedge ((X2 = X0) \wedge (X1 = k2_newton (k1_real_1 np_1) \\ (k5_card_1 (k1_polynom2 k10_newton (k13_nat_3 X2)))))))))) \quad (4) \end{aligned}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k5_numbers)) \Rightarrow ((X0 = k1_moebius1) \Leftrightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X1 \in X0) \Leftrightarrow (\neg v1_moebius1 X1)))) \quad (5)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((X0 \in k1_moebius1) \Leftrightarrow (k2_moebius1 X0 \neq k6_numbers))$$