

t10_cardfin2

(TMafTzQBGzt63A5SW8qaUt5eqQeU8yo3key)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $k2_cardfin2 : \iota \Rightarrow \iota$ be given. Let $k1_cardfin2 : \iota \Rightarrow \iota$ be given. Let $k12_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_newton : \iota \Rightarrow \iota$ be given. Let $k8_power : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $k17_complex1 : \iota \Rightarrow \iota$ be given. Let $k10_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v1_xboole_0 X0) \wedge (v1_finset_1 X0)) \Rightarrow (\neg r1_xxreal_0 \\ &(k18_binop_2 np_1 np_2) (k17_complex1 (k10_binop_2 (k5_card_1 \\ &(k2_cardfin2 X0)) (k12_binop_2 (k3_newton (k5_card_1 X0)) k8_power)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_int_1 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow ((\neg r1_xxreal_0 \\ (k18_binop_2 np_1 np_2) (k17_complex1 (k10_binop_2 X0 X1))) \Rightarrow \\ (X0 = k1_cardfin2 X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow (v1_xreal_0 (k3_newton X0)) \quad (3)$$

Assume the following.

$$\forall X0. (v1_finset_1 X0) \Rightarrow (v1_finset_1 (k2_cardfin2 X0)) \quad (4)$$

Assume the following.

$$m1_subset_1 k8_power k1_numbers \quad (5)$$

Assume the following.

$$\forall X0. (v1_finset_1 X0) \Rightarrow (m1_subset_1 (k5_card_1 X0) k4_ordinal1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(v1_xreal_0 X1))\Rightarrow(m1_subset_1 (k12_binop_2 X0 X1) k1_numbers) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(v1_int_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (10)$$

Theorem 1

$$\forall X0.((\neg v1_xboole_0 X0)\wedge(v1_finset_1 X0))\Rightarrow(k5_card_1 (k2_cardfin2 X0) = k1_cardfin2 (k12_binop_2 (k3_newton (k5_card_1 X0)) k8_power))$$