

t34_prepower (TMQFGRBd- pyz3iQQALRGsLPkPhfvPZ9SdjVp)

October 27, 2020

Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. 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 $k1_numbers : \iota$ 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 $k1_prepower : \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_complex1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k1_int_2 : \iota \Rightarrow \iota$ be given. Let $k16_complex1 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0. (v1_xreal_0 X0) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 \\ X1 k5_numbers k1_numbers) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ k5_numbers k1_numbers)))))) \Rightarrow ((X1 = k1_prepower X0) \Leftrightarrow ((k1_seq_1 \\ X1 k6_numbers = np_1) \wedge (\forall X2. (m2_subset_1 X2 k1_numbers \\ k5_numbers) \Rightarrow (k1_seq_1 X1 (k2_nat_1 X2 np_1) = k8_real_1 (k1_seq_1 \\ X1 X2) X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow ((X0 = k6_numbers) \Leftrightarrow (k18_complex1 X0 = k6_numbers)) \quad (3)$$

Assume the following.

$$m1_subset_1 k1_xboole_0 k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow(r1_xxreal_0 X0 X0) \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.(v1_int_1 X0)\Rightarrow(k1_int_2 X0 = k16_complex1 X0) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(k18_complex1 X0 = k16_complex1 X0) \quad (8)$$

Assume the following.

$$\exists X0.(v1_xboole_0 X0)\wedge((v1_xcmplx_0 X0)\wedge((v1_xxreal_0 X0)\wedge(v1_xreal_0 X0))) \quad (9)$$

Assume the following.

$$\exists X0.(m1_subset_1 X0 k1_numbers)\wedge((v1_xxreal_0 X0)\wedge((v1_xcmplx_0 X0)\wedge((v1_xreal_0 X0)\wedge(v1_int_1 X0)))) \quad (10)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (11)$$

Assume the following.

$$m2_subset_1 k6_numbers k1_numbers k5_numbers \quad (12)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow((v1_funct_1 (k1_prepower X0))\wedge((v1_funct_2 (k1_prepower X0) k5_numbers k1_numbers)\wedge(m1_subset_1 (k1_prepower X0) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(\forall X1.(v1_int_1 X1)\Rightarrow(((r1_xxreal_0 k6_numbers X1)\Rightarrow(k4_prepower X0 X1 = k1_newton X0 (k1_int_2 X1)))\wedge((\neg r1_xxreal_0 k6_numbers X1)\Rightarrow(k4_prepower X0 X1 = k5_xcmplx_0 (k1_newton X0 (k1_int_2 X1)))))) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers k1_numbers)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers))))))\Rightarrow((X1 = k1_prepower X0)\Leftrightarrow(\forall X2.(m2_subset_1 X2 k1_numbers k5_numbers)\Rightarrow(k1_seq_1 X1 X2 = k1_newton X0 X2)))) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (16)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (17)$$

Theorem 1 $\forall X0.(v1_xreal_0 X0) \Rightarrow (k4_prepower X0 k6_numbers = np_1).$