

t40_prepower
(TMRLj1ZdjHDkcEYSpNWbxDtCpbfPy47fq5b)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k4_ppower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $np_0 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_int_2 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v1_xcmplx_0\ X1) \Rightarrow (\forall X2. \\ & (v1_xcmplx_0\ X2) \Rightarrow (k1_newton\ (k3_xcmplx_0\ X1\ X2)\ X0 = k3_xcmplx_0 \\ & (k1_newton\ X1\ X0)\ (k1_newton\ X2\ X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0) \Rightarrow (X0 = k1_xboole_0) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_xcmplx_0\ X0) \wedge (v1_xcmplx_0\ X1)) \Rightarrow (\\ & k3_xcmplx_0\ (k5_xcmplx_0\ X0)\ (k5_xcmplx_0\ X1) = k5_xcmplx_0\ (k3_xcmplx_0 \\ & X0\ X1)) \end{aligned} \tag{3}$$

Assume the following.

$$v1_xboole_0\ np_0 \tag{4}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{5}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(v1_xreal_0 X1))\Rightarrow(v1_xreal_0 (k3_xcmplx_0 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v7_ordinal1 X1))\Rightarrow(v1_xcmplx_0 (k1_newton X0 X1)) \quad (8)$$

Assume the following.

$$\forall X0.(v1_int_1 X0)\Rightarrow(m1_subset_1 (k1_int_2 X0) k5_numbers) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0)\Rightarrow(\forall X1.(v1_int_1 X1)\Rightarrow(((r1_xxreal_0 \\ k6_numbers X1)\Rightarrow(k4_prepower X0 X1 = k1_newton X0 (k1_int_2 X1)))\wedge \\ ((\neg r1_xxreal_0 k6_numbers X1)\Rightarrow(k4_prepower X0 X1 = k5_xcmplx_0 \\ (k1_newton X0 (k1_int_2 X1)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xcmplx_0 X0) \quad (12)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_xreal_0 X0)\Rightarrow(\forall X1.(v1_xreal_0 X1)\Rightarrow(\forall X2. \\ (v1_int_1 X2)\Rightarrow(k4_prepower (k3_xcmplx_0 X0 X1) X2 = k3_xcmplx_0 \\ (k4_prepower X0 X2) (k4_prepower X1 X2)))) \end{aligned}$$