

t27_prepower (TMMtLDb- BuyQWL9D2C9pgiq9ouo8jXLk2mEL)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_ppower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X2)) \Rightarrow \\ & (r1_xxreal_0 X0 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ & (r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (((\\ & r1_xxreal_0 k6_numbers X0) \wedge (r1_xxreal_0 np_1 X1)) \Rightarrow ((k1_newton \\ & (k2_ppower X1 X0) X1 = X0) \wedge (k2_ppower X1 (k1_newton X0 X1) = X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (\neg(r1_xxreal_0 k6_numbers X0) \wedge (\neg(r1_xxreal_0 \\ & X1 X0) \wedge ((r1_xxreal_0 np_1 X2) \wedge (r1_xxreal_0 (k1_newton X1 X2) \\ & (k1_newton X0 X2))))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 X2 X0 X1)\Leftrightarrow(m1_subset_1 X2 X1)) \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

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.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(\forall X1.(v1_xreal_0 X1)\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow(\neg(\neg r1_xxreal_0 X0 k6_numbers)\wedge((\neg r1_xxreal_0 X1 X0)\wedge((r1_xxreal_0 np_1 X2)\wedge(r1_xxreal_0 (k1_newton X1 X2) (k1_newton X0 X2)))))))) \quad (10)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1)\wedge(v3_ordinal1 k4_ordinal1) \quad (11)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (12)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(v1_xreal_0 X1))\Rightarrow(v1_xreal_0 (k2_prepower X0 X1)) \quad (14)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(v1_xreal_0 X1)\Rightarrow((r1_xxreal_0 np_1 X0)\Rightarrow(\forall X2.(v1_xreal_0 X2)\Rightarrow(((\neg r1_xxreal_0 X1 k6_numbers)\Rightarrow((X2 = k2_prepower X0 X1)\Leftrightarrow((k1_newton X2 X0 = X1)\wedge(\neg r1_xxreal_0 X2 k6_numbers))))\wedge((X1 = k6_numbers)\Rightarrow((X2 = k2_prepower X0 X1)\Leftrightarrow(X2 = k6_numbers))))))) \quad (15)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (17)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (m2_subset_1 X2 k1_numbers k5_numbers) \Rightarrow (((r1_xxreal_0 k6_numbers \\ & X0) \wedge ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 np_1 X2))) \Rightarrow (r1_xxreal_0 \\ & (k2_prepower X2 X0) (k2_prepower X2 X1)))))) \end{aligned}$$