

t18_power

(TMYtbFnu2gcS6XDVXodXLjbpMWKvzu2qEma)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_power : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k2_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_abian : \iota \Rightarrow o$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ 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.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(m2_subset_1 X1 k1_numbers \\ k5_numbers) \Rightarrow (((r1_xxreal_0 np_1 X0) \wedge (r1_xxreal_0 np_1 X1)) \Rightarrow \\ ((r1_xxreal_0 np_1 (k2_prepower X1 X0)) \wedge (r1_xxreal_0 (k2_prepower \\ X1 X0) X0)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$(m2_subset_1 np_0 k1_numbers k5_numbers) \wedge ((m1_subset_1 np_0 \\ k5_numbers) \wedge (m1_subset_1 np_0 k1_numbers)) \quad (5)$$

Assume the following.

$$v1_xboole_0 \text{ } np_0 \quad (6)$$

Assume the following.

$$r1_xxreal_0 \text{ } np_0 \text{ } np_1 \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 \text{ } X0)\wedge((\neg v1_xboole_0 \text{ } X1)\wedge \\ (m1_subset_1 \text{ } X1 \text{ } (k1_zfmisc_1 \text{ } X0))))\Rightarrow(\forall X2.(m2_subset_1 \\ X2 \text{ } X0 \text{ } X1)\Leftrightarrow(m1_subset_1 \text{ } X2 \text{ } X1)) \end{aligned} \quad (8)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (9)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (10)$$

Assume the following.

$$(\neg v1_xboole_0 \text{ } k4_ordinal1)\wedge(v3_ordinal1 \text{ } k4_ordinal1) \quad (11)$$

Assume the following.

$$m1_subset_1 \text{ } k5_numbers \text{ } (k1_zfmisc_1 \text{ } k1_numbers) \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 \text{ } X0)\Rightarrow(\forall X1.(v1_xreal_0 \text{ } X1)\Rightarrow(((\\ (r1_xxreal_0 \text{ } k6_numbers \text{ } X1)\wedge(r1_xxreal_0 \text{ } np_1 \text{ } X0))\Rightarrow(k1_power \\ X0 \text{ } X1 = k2_prepower \text{ } X0 \text{ } X1))\wedge(\neg(\neg r1_xxreal_0 \text{ } k6_numbers \text{ } X1)\wedge(\neg \\ v1_abian \text{ } X0)\wedge(k1_power \text{ } X0 \text{ } X1\neq k4_xcmplx_0 \text{ } (k2_prepower \text{ } X0 \text{ } (k4_xcmplx_0 \\ X1)))))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1 \text{ } X0 \text{ } k4_ordinal1)\Rightarrow(v7_ordinal1 \text{ } X0) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \text{ } X0)\Rightarrow(v1_xxreal_0 \text{ } X0) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1 \text{ } X0 \text{ } k1_numbers)\Rightarrow(v1_xreal_0 \text{ } X0) \quad (16)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \text{ } X0)\Rightarrow(\forall X1.(m1_subset_1 \text{ } X1 \text{ } (k1_zfmisc_1 \\ X0))\Rightarrow(v1_xboole_0 \text{ } X1)) \quad (17)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_xreal_0 \text{ } X0)\Rightarrow(\forall X1.(m1_subset_1 \text{ } X1 \text{ } k5_numbers)\Rightarrow \\ (((r1_xxreal_0 \text{ } np_1 \text{ } X0)\wedge(r1_xxreal_0 \text{ } np_1 \text{ } X1))\Rightarrow((r1_xxreal_0 \\ np_1 \text{ } (k1_power \text{ } X1 \text{ } X0))\wedge(r1_xxreal_0 \text{ } (k1_power \text{ } X1 \text{ } X0) \text{ } X0)))) \end{aligned}$$