

t20_power

(TMUduGbuUHxxaN2DdZ4ntBNcFCb8irjEepV)

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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 $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_power : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k2_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ 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.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(m2_subset_1 X1 k1_numbers \\ k5_numbers) \Rightarrow (((r1_xxreal_0 k6_numbers X0) \wedge (r1_xxreal_0 np_1 \\ X1)) \Rightarrow ((r1_xxreal_0 np_1 X0) \vee ((r1_xxreal_0 X0 (k2_prepower X1 \\ X0)) \wedge (\neg r1_xxreal_0 np_1 (k2_prepower X1 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (4)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (5)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v1_xreal_0\ X1) \Rightarrow (((\\ (r1_xxreal_0\ k6_numbers\ X1) \wedge (r1_xxreal_0\ np_1\ X0) \Rightarrow (k1_power \\ X0\ X1 = k2_prepower\ X0\ X1)) \wedge (\neg(\neg r1_xxreal_0\ k6_numbers\ X1) \wedge (\neg \\ v1_abian\ X0) \wedge (k1_power\ X0\ X1 \neq k4_xcmplx_0\ (k2_prepower\ X0\ (k4_xcmplx_0 \\ X1)))))))) \end{aligned} \quad (7)$$

Assume the following.

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

Theorem 1

$$\begin{aligned} \forall X0.(v1_xreal_0\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ k5_numbers) \Rightarrow \\ (((r1_xxreal_0\ k6_numbers\ X0) \wedge (r1_xxreal_0\ np_1\ X1) \Rightarrow ((r1_xxreal_0 \\ np_1\ X0) \vee ((r1_xxreal_0\ X0\ (k1_power\ X1\ X0)) \wedge (\neg r1_xxreal_0\ np_1 \\ (k1_power\ X1\ X0)))))) \end{aligned}$$