

t17\_power (TM-  
bAd8Z3cy1XBtH9aMgAbwDKCZSJ1sa6n5J)

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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  $v1\_abian : \iota \Rightarrow o$  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  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $np\_0 : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((\neg \\ (\neg(r1\_xxreal\_0 np\_1 X1) \wedge (r1\_xxreal\_0 k6\_numbers X0)) \wedge (v1\_abian \\ X1)) \Rightarrow ((k1\_newton (k1\_power X1 X0) X1 = X0) \wedge (k1\_power X1 (k1\_newton \\ X0 X1) = X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xxreal\_0 X2) \Rightarrow (((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X2)) \Rightarrow \\ (r1\_xxreal\_0 X0 X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ (r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X0)) \Rightarrow (X0 = X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ (m1\_subset\_1 X2 k5\_numbers) \Rightarrow ((r1\_xxreal\_0 X0 X1) \Rightarrow (((\neg(r1\_xxreal\_0 \\ k6\_numbers X0) \wedge (r1\_xxreal\_0 np\_1 X2)) \wedge (v1\_abian X2)) \vee (r1\_xxreal\_0 \\ (k1\_power X2 X0) (k1\_power X2 X1)))))) \end{aligned} \quad (5)$$

Assume the following.

$$v1\_xboole\_0 \text{ np\_}0 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0 X0)\wedge(v1\_xxreal\_0 X1))\Rightarrow( r1\_xxreal\_0 X0 X0) \quad (7)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (8)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (9)$$

Assume the following.

$$\exists X0.(v1\_xboole\_0 X0)\wedge(v1\_xxreal\_0 X0) \quad (10)$$

Assume the following.

$$\exists X0.(m1\_subset\_1 X0 k1\_numbers)\wedge((v1\_xxreal\_0 X0)\wedge(( v1\_xcmplx\_0 X0)\wedge((v1\_xreal\_0 X0)\wedge(v1\_int\_1 X0)))) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1 X0)\wedge(v1\_xreal\_0 X1))\Rightarrow(v1\_xreal\_0 (k1\_power X0 X1)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0 X0)\wedge(v1\_xxreal\_0 X1))\Rightarrow( (r1\_xxreal\_0 X0 X1)\vee(r1\_xxreal\_0 X1 X0)) \quad (13)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (14)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow(v1\_xxreal\_0 X0) \quad (15)$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow(\forall X1.(v1\_xreal\_0 X1)\Rightarrow(\forall X2. (m1\_subset\_1 X2 k5\_numbers)\Rightarrow(\neg(\neg r1\_xxreal\_0 X1 X0)\wedge((\neg(\neg(r1\_xxreal\_0 k6\_numbers X0)\wedge(r1\_xxreal\_0 np\_1 X2))\wedge(v1\_abian X2))\wedge(r1\_xxreal\_0 (k1\_power X2 X1) (k1\_power X2 X0))))))$$