

# t64\_power (TM- FLjE1MYTBkGfEFx6NmgvGWD91SzHwcSep)

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Let  $k4\_power : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $np\_6 : \iota$  be given. Let  $np\_64 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $np\_3 : \iota$  be given. Let  $np\_8 : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k3\_power : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_0 : \iota$  be given. Assume the following.

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

Assume the following.

$$k4\_power\ np\_2\ np\_3 = np\_8 \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xreal\_0 X2) \Rightarrow ((\neg r1\_xxreal\_0 X0\ k6\_numbers) \Rightarrow (k3\_power X0\ ( \\ k2\_xcmplx\_0 X1\ X2) = k3\_xcmplx\_0 (k3\_power X0\ X1)\ (k3\_power X0\ X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} ((v2\_xxreal\_0\ np\_6) \wedge (m2\_subset\_1\ np\_6\ k1\_numbers\ k5\_numbers)) \wedge \\ ((m1\_subset\_1\ np\_6\ k5\_numbers) \wedge (m1\_subset\_1\ np\_6\ k1\_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} ((v2\_xxreal\_0\ np\_3) \wedge (m2\_subset\_1\ np\_3\ k1\_numbers\ k5\_numbers)) \wedge \\ ((m1\_subset\_1\ np\_3\ k5\_numbers) \wedge (m1\_subset\_1\ np\_3\ k1\_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} ((v2\_xxreal\_0\ np\_2) \wedge (m2\_subset\_1\ np\_2\ k1\_numbers\ k5\_numbers)) \wedge \\ ((m1\_subset\_1\ np\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_2\ k1\_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$v1\_xboole\_0 \text{ } np\_0 \tag{7}$$

Assume the following.

$$k3\_xcmplx\_0 \text{ } np\_8 \text{ } np\_8 = np\_64 \tag{8}$$

Assume the following.

$$k2\_xcmplx\_0 \text{ } np\_3 \text{ } np\_3 = np\_6 \tag{9}$$

Assume the following.

$$\neg r1\_xreal\_0 \text{ } np\_2 \text{ } np\_0 \tag{10}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{11}$$

Assume the following.

$$\forall X0. \forall X1. ((m1\_subset\_1 \text{ } X0 \text{ } k1\_numbers) \wedge (m1\_subset\_1 \text{ } X1 \text{ } k1\_numbers)) \Rightarrow (k4\_power \text{ } X0 \text{ } X1 = k3\_power \text{ } X0 \text{ } X1) \tag{12}$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \text{ } X0 \text{ } k1\_numbers) \Rightarrow (v1\_xreal\_0 \text{ } X0) \tag{13}$$

**Theorem 1**  $k4\_power \text{ } np\_2 \text{ } np\_6 = np\_64$ .