

t47\_fib\_num2

(TMZi4t1i9baG7BGVKLrvD4oj8imSs4jvUv8)

October 27, 2020

Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_pre\_ff : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  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. Let  $k4\_ordinal1 : \iota$  be given. Assume the following.

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

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (\neg (\neg r1\_xxreal\_0 X1 np\_1) \wedge ((\neg r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 (k1\_pre\_ff X0) (k1\_pre\_ff X1)))))) \quad (2)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\neg (r1\_xxreal\_0 X0 np\_2) \wedge ((X0 \neq k6\_numbers) \wedge ((X0 \neq np\_1) \wedge (X0 \neq np\_2)))) \quad (3)$$

Assume the following.

$$k1\_pre\_ff np\_2 = np\_1 \quad (4)$$

Assume the following.

$$(k1\_pre\_ff k6\_numbers = k6\_numbers) \wedge ((k1\_pre\_ff np\_1 = np\_1) \wedge (\forall X0.(v7\_ordinal1 X0) \Rightarrow (k1\_pre\_ff (k2\_nat\_1 (k1\_nat\_1 X0 np\_1) np\_1) = k2\_nat\_1 (k1\_pre\_ff X0) (k1\_pre\_ff (k1\_nat\_1 X0 np\_1)))))) \quad (5)$$

Assume the following.

$$((v2\_xxreal\_0 np\_2) \wedge (m2\_subset\_1 np\_2 k1\_numbers k5\_numbers)) \wedge ((m1\_subset\_1 np\_2 k5\_numbers) \wedge (m1\_subset\_1 np\_2 k1\_numbers)) \quad (6)$$

Assume the following.

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

Assume the following.

$$\neg r1\_xxreal\_0 \text{ } np\_2 \text{ } np\_1 \tag{8}$$

Assume the following.

$$r1\_xxreal\_0 \text{ } np\_1 \text{ } np\_1 \tag{9}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{10}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{11}$$

Assume the following.

$$\forall X0.(m1\_subset\_1 \text{ } X0 \text{ } k4\_ordinal1) \Rightarrow (v7\_ordinal1 \text{ } X0) \tag{12}$$

**Theorem 1**

$$\forall X0.(v7\_ordinal1 \text{ } X0) \Rightarrow ((k1\_pre\_ff \text{ } X0 = np\_1) \Leftrightarrow ((X0 = np\_1) \vee (X0 = np\_2)))$$