

## t1\_fib\_num4

(TMV7AwCWAsc8T1XKrcu3tj6MAinizMxBAM)

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Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k3\_power : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k13\_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ (v7\_ordinal1 X2) \Rightarrow (k1\_newton (k13\_complex1 X0 X1) X2 = k13\_complex1 \\ (k1\_newton X0 X2) (k1\_newton X1 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow (k13\_complex1 X0 X1 = k7\_xcmplx\_0 X0 X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0) \wedge (v7\_ordinal1 X1)) \Rightarrow (k3\_power X0 X1 = k1\_newton X0 X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow (v1\_xreal\_0 (k7\_xcmplx\_0 X0 X1)) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xcmplx\_0 X0) \tag{5}$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ (v7\_ordinal1 X2) \Rightarrow (k3\_power (k13\_complex1 X0 X1) X2 = k13\_complex1 \\ (k3\_power X0 X2) (k3\_power X1 X2)))) \end{aligned}$$