

# t4\_newton (TMX- odoV4sU9cHwnCp6NdqkhX1vup3EtqUBS)

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Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k21\_rvsum\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k19\_rvsum\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$k21\_rvsum\_1 (k6\_finseq\_1 k1\_numbers) = np\_1 \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (2)$$

Assume the following.

$$m1\_subset\_1 k1\_xboole\_0 k4\_ordinal1 \quad (3)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (4)$$

Assume the following.

$$\forall X0.(m1\_finseq\_1 X0 k1\_numbers) \Rightarrow (k21\_rvsum\_1 X0 = k19\_rvsum\_1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\exists X1.(m1\_finseq\_1 X1 X0) \wedge ((v1\_relat\_1 X1) \wedge (v4\_relat\_1 X1 k5\_numbers) \wedge ((v5\_relat\_1 X1 X0) \wedge ((v1\_funct\_1 X1) \wedge ((v1\_xboole\_0 X1) \wedge ((v1\_finset\_1 X1) \wedge (v1\_finseq\_1 X1)))))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(v7\_ordinal1\ X0)\Rightarrow((v1\_relat\_1\ (k2\_finseq\_2\ X0\ X1))\wedge((v1\_funct\_1\ (k2\_finseq\_2\ X0\ X1))\wedge((v3\_card\_1\ (k2\_finseq\_2\ X0\ X1)\ X0)\wedge(v1\_finseq\_1\ (k2\_finseq\_2\ X0\ X1)))))) \quad (7)$$

Assume the following.

$$\forall X0.k6\_finseq\_1\ X0 = k1\_xboole\_0 \quad (8)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow(k1\_newton\ X0\ X1 = k19\_rvsum\_1\ (k2\_finseq\_2\ X1\ X0))) \quad (9)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \quad (10)$$

Assume the following.

$$\forall X0.(v3\_card\_1\ X0\ k1\_xboole\_0)\Rightarrow(v1\_xboole\_0\ X0) \quad (11)$$

**Theorem 1**  $\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(k1\_newton\ X0\ k6\_numbers = np\_1).$