

t10\_newton  
(TMJqmwjmrGg5XV6Gatg7x1ZEyiqSe7gWNCv)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k2\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  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  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  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  $k5\_numbers : \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k19\_rvsum\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $k2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  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.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k1\_newton X1 (k1\_nat\_1 X0 np\_1) = k3\_xcmplx\_0 (k1\_newton X1 X0) X1)) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k3\_xcmplx\_0 np\_1 X0 = X0) \quad (4)$$

Assume the following.

$$m1\_subset\_1 k1\_xboole\_0 k4\_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k2\_xcmplx\_0 X0 k6\_numbers = X0) \quad (6)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 \ np\_1) \wedge (m2\_subset\_1 \ np\_1 \ k1\_numbers \ k5\_numbers)) \wedge \\ & ((m1\_subset\_1 \ np\_1 \ k5\_numbers) \wedge (m1\_subset\_1 \ np\_1 \ k1\_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow o. ((X0 \ k6\_numbers) \wedge (\forall X1. (v7\_ordinal1 \\ & X1) \Rightarrow ((X0 \ X1) \Rightarrow (X0 \ (k1\_nat\_1 \ X1 \ np\_1)))))) \Rightarrow (\forall X1. (v7\_ordinal1 \\ & X1) \Rightarrow (X0 \ X1)) \end{aligned} \quad (8)$$

Assume the following.

$$k3\_xcmplx\_0 \ np\_1 \ np\_1 = np\_1 \quad (9)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (10)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1\_subset\_1 \ X0 \ k1\_numbers) \wedge (v7\_ordinal1 \\ & X1)) \Rightarrow (k2\_newton \ X0 \ X1 = k1\_newton \ X0 \ X1) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1\_finseq\_1 \ X0 \ k1\_numbers) \Rightarrow (k21\_rvsum\_1 \ X0 = k19\_rvsum\_1 \\ & X0) \end{aligned} \quad (13)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v7\_ordinal1 \ X0) \wedge (m1\_subset\_1 \ X1 \ k5\_numbers)) \Rightarrow \\ & (k1\_nat\_1 \ X0 \ X1 = k2\_xcmplx\_0 \ X0 \ X1) \end{aligned} \quad (14)$$

Assume the following.

$$\begin{aligned} & \exists X0. (v1\_xboole\_0 \ X0) \wedge ((v1\_xcmplx\_0 \ X0) \wedge ((v1\_xxreal\_0 \\ & X0) \wedge (v1\_xreal\_0 \ X0))) \end{aligned} \quad (15)$$

Assume the following.

$$\begin{aligned} & \forall X0. \exists X1. (m1\_finseq\_1 \ X1 \ X0) \wedge ((v1\_relat\_1 \ X1) \wedge ( \\ & (v4\_relat\_1 \ X1 \ k5\_numbers) \wedge ((v5\_relat\_1 \ X1 \ X0) \wedge ((v1\_funct\_1 \\ & X1) \wedge ((v1\_xboole\_0 \ X1) \wedge ((v1\_finset\_1 \ X1) \wedge (v1\_finseq\_1 \ X1)))))) \end{aligned} \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.(v7\_ordinal1\ X0)\Rightarrow((v1\_relat\_1\ (k2\_finseq\_2\ X0\ X1))\wedge((v1\_funct\_1\ (k2\_finseq\_2\ X0\ X1))\wedge((v3\_card\_1\ (k2\_finseq\_2\ X0\ X1)\ X0)\wedge(v1\_finseq\_1\ (k2\_finseq\_2\ X0\ X1)))))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v7\_ordinal1\ X1))\Rightarrow(v1\_xcmplx\_0\ (k1\_newton\ X0\ X1)) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(v7\_ordinal1\ X1))\Rightarrow(v7\_ordinal1\ (k2\_xcmplx\_0\ X0\ X1)) \quad (19)$$

Assume the following.

$$\forall X0.k6\_finseq\_1\ X0 = k1\_xboole\_0 \quad (20)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow(k1\_newton\ X0\ X1 = k19\_rvsum\_1\ (k2\_finseq\_2\ X1\ X0))) \quad (21)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k3\_xcmplx\_0\ X0\ X1 = k3\_xcmplx\_0\ X1\ X0) \quad (22)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k2\_xcmplx\_0\ X0\ X1 = k2\_xcmplx\_0\ X1\ X0) \quad (23)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \quad (24)$$

Assume the following.

$$\forall X0.(v3\_card\_1\ X0\ k1\_xboole\_0)\Rightarrow(v1\_xboole\_0\ X0) \quad (25)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xcmplx\_0\ X0) \quad (26)$$

**Theorem 1**  $\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k2\_newton\ np\_1\ X0 = np\_1).$