

t23\_newton  
(TMKhgkmK52YAgsnh1qAPZ5ENRmthW2ur38r)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k5\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  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  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (k5\_newton \\ (k1\_nat\_1 X1 np\_1) (k1\_nat\_1 X0 np\_1) = k7\_real\_1 (k5\_newton ( \\ k1\_nat\_1 X1 np\_1) X0) (k5\_newton X1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (k5\_newton X0 X0 = np\_1) \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k2\_xcmplx\_0 X0 k6\_numbers = X0) \quad (4)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (k5\_newton k6\_numbers X0 = np\_1) \quad (5)$$

Assume the following.

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

Assume the following.

$$\forall X0 : \iota \Rightarrow o. \forall X1. ((X0 \ X1) \wedge (\forall X2. (v7\_ordinal1 \ X2) \Rightarrow ((r1\_xxreal\_0 \ X1 \ X2) \wedge (X0 \ X2)) \Rightarrow (X0 \ (k1\_nat\_1 \ X2 \ np\_1)))) \Rightarrow (\forall X2. (v7\_ordinal1 \ X2) \Rightarrow ((r1\_xxreal\_0 \ X1 \ X2) \Rightarrow (X0 \ X2))) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. ((m1\_subset\_1 \ X0 \ k1\_numbers) \wedge (v1\_xreal\_0 \ X1)) \Rightarrow (k7\_real\_1 \ X0 \ X1 = k2\_xcmplx\_0 \ X0 \ X1) \quad (8)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (9)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (10)$$

Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 \ X0) \wedge (m1\_subset\_1 \ X1 \ k5\_numbers)) \Rightarrow (k1\_nat\_1 \ X0 \ X1 = k2\_xcmplx\_0 \ X0 \ X1) \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 \ X0) \wedge (v7\_ordinal1 \ X1)) \Rightarrow (m1\_subset\_1 \ (k5\_newton \ X0 \ X1) \ k1\_numbers) \quad (12)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xcmplx\_0 \ X0) \wedge (v1\_xcmplx\_0 \ X1)) \Rightarrow (k2\_xcmplx\_0 \ X0 \ X1 = k2\_xcmplx\_0 \ X1 \ X0) \quad (13)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \ X0 \ k4\_ordinal1) \Rightarrow (v7\_ordinal1 \ X0) \quad (14)$$

Assume the following.

$$\forall X0. (v7\_ordinal1 \ X0) \Rightarrow (v1\_xcmplx\_0 \ X0) \quad (15)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \ X0 \ k1\_numbers) \Rightarrow (v1\_xreal\_0 \ X0) \quad (16)$$

**Theorem 1**

$$\forall X0. (v7\_ordinal1 \ X0) \Rightarrow ((r1\_xxreal\_0 \ np\_1 \ X0) \Rightarrow (k5\_newton \ np\_1 \ X0 = X0))$$