

## t10\_wsierp\_1

(TMYdfU3fmXycrDARozjVXYYgs6Ch7mqom1P)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $r1\_int\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  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  $k6\_numbers : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (r1\_int\_2 np\_1 X0) \quad (1)$$

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.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k1\_newton X0 k6\_numbers = np\_1) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow (\forall X2.(v1\_int\_1 X2) \Rightarrow (((r1\_int\_2 X0 X1) \wedge (r1\_int\_2 X2 X1)) \Rightarrow (r1\_int\_2 (k3\_xcmplx\_0 X0 X2) X1)))) \quad (4)$$

Assume the following.

$$\forall X0 : \iota \Rightarrow o. ((X0 k6\_numbers) \wedge (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((X0 X1) \Rightarrow (X0 (k1\_nat\_1 X1 np\_1)))))) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1 X0) \wedge (v7\_ordinal1 X1)) \Rightarrow (v1\_int\_1 (k1\_newton X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xcmplx\_0 X0) \quad (7)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (v1\_xreal\_0 X0) \quad (8)$$

**Theorem 1**

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v1\_int\_1\ X1) \Rightarrow (\forall X2. \\ (v1\_int\_1\ X2) \Rightarrow ((r1\_int\_2\ X1\ X2) \Rightarrow (r1\_int\_2\ (k1\_newton\ X1\ X0)\ X2))))$$