

t14\_wsierp\_1  
(TMNa6dBaigBgEuk7E54urjhHFbJaQV17SFM)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_nat\_d : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xcmplx\_0 X2) \Rightarrow (k1\_newton (k3\_xcmplx\_0 X1 X2) X0 = k3\_xcmplx\_0 \\ (k1\_newton X1 X0) (k1\_newton X2 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1 X0) \wedge (v7\_ordinal1 X1)) \Rightarrow (v7\_ordinal1 (k1\_newton X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((r1\_nat\_d X0 X1) \Leftrightarrow (\exists X2.(v7\_ordinal1 X2) \wedge (X1 = k3\_xcmplx\_0 X0 X2)))) \quad (3)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_xcmplx\_0 X0) \quad (4)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (\forall X2. \\ (v7\_ordinal1 X2) \Rightarrow ((r1\_nat\_d X0 X1) \Rightarrow (r1\_nat\_d (k1\_newton X0 X2) \\ (k1\_newton X1 X2)))))) \end{aligned}$$