

# l1\_series\_4 (TMUcpvTuU- Uowhhc8oSCJ5bWNHrhHUiyetWb)

October 27, 2020

Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $np\_4 : \iota$  be given. Let  $k13\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k3\_square\_1 : \iota \Rightarrow \iota$  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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k3\_square\_1 \\ (k2\_xcmplx\_0 X0 X1) = k2\_xcmplx\_0 (k2\_xcmplx\_0 (k3\_square\_1 X0) \\ (k3\_xcmplx\_0 (k3\_xcmplx\_0 np\_2 X0) X1)) (k3\_square\_1 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k3\_xcmplx\_0 X0 X0 = k1\_newton X0 np\_2) \quad (2)$$

Assume the following.

$$\begin{aligned} ((v2\_xxreal\_0 np\_2) \wedge (m2\_subset\_1 np\_2 k1\_numbers k5\_numbers)) \wedge \\ ((m1\_subset\_1 np\_2 k5\_numbers) \wedge (m1\_subset\_1 np\_2 k1\_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$k3\_xcmplx\_0 np\_2 np\_2 = np\_4 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1 X0 k5\_numbers) \wedge (m1\_subset\_1 X1 k5\_numbers)) \Rightarrow (k13\_newton X0 X1 = k1\_newton X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (k3\_square\_1 X0 = k1\_newton X0 np\_2) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow (v1\_xreal\_0 (k2\_xcmplx\_0 X0 X1)) \quad (7)$$

Assume the following.

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

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers)\Rightarrow(v1\_xcmplx\_0 X0) \quad (9)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0)\Rightarrow(\forall X1.(v1\_xreal\_0 X1)\Rightarrow((np\_4 = \\ k13\_newton\ np\_2\ np\_2)\wedge(k1\_newton\ (k2\_xcmplx\_0\ X0\ X1)\ np\_2 = \\ k2\_xcmplx\_0\ (k2\_xcmplx\_0\ (k1\_newton\ X0\ np\_2)\ (k3\_xcmplx\_0\ (k3\_xcmplx\_0 \\ np\_2\ X0)\ X1))\ (k1\_newton\ X1\ np\_2)))) \end{aligned}$$