

t31\_pepin  
(TMcwodA8TtrVciD6HzafPKMw9qx3PyfRHkj)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_nat\_d : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  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. Let  $k4\_ordinal1 : \iota$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0\ np\_2) \wedge (m2\_subset\_1\ np\_2\ k1\_numbers\ k5\_numbers)) \wedge \\ & ((m1\_subset\_1\ np\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_2\ k1\_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((m1\_subset\_1\ X0\ k1\_numbers) \wedge (v7\_ordinal1\ X1)) \Rightarrow (k2\_newton\ X0\ X1 = k1\_newton\ X0\ X1) \quad (3)$$

Assume the following.

$$\forall X0. (v7\_ordinal1\ X0) \Rightarrow (\forall X1. (v7\_ordinal1\ X1) \Rightarrow ((r1\_nat\_d\ (k2\_newton\ np\_2\ X0)\ (k2\_newton\ np\_2\ X1)) \Rightarrow (r1\_xxreal\_0\ X0\ X1))) \quad (4)$$

Assume the following.

$$\forall X0. (v7\_ordinal1\ X0) \Rightarrow (\forall X1. (v7\_ordinal1\ X1) \Rightarrow (\forall X2. (v7\_ordinal1\ X2) \Rightarrow ((r1\_xxreal\_0\ X0\ X1) \Rightarrow (r1\_nat\_d\ (k1\_newton\ X2\ X0)\ (k1\_newton\ X2\ X1)))))) \quad (5)$$

Assume the following.

$$\forall X0. (m1\_subset\_1\ X0\ k4\_ordinal1) \Rightarrow (v7\_ordinal1\ X0) \quad (6)$$

**Theorem 1**

$$\forall X0. (v7\_ordinal1\ X0) \Rightarrow (\forall X1. (v7\_ordinal1\ X1) \Rightarrow ((r1\_xxreal\_0\ X0\ X1) \Leftrightarrow (r1\_nat\_d\ (k2\_newton\ np\_2\ X0)\ (k2\_newton\ np\_2\ X1))))$$