

# l85\_pepin

(TMZhC9pGanSErr7iLYXFzBwqhJcV4gB2bV4)

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Let  $k4\_nat\_d : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k13\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_3 : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k4\_pepin : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_257 : \iota$  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  $np\_0 : \iota$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k6\_int\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_nat\_d : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k1\_newton X0 np\_1 = X0) \quad (1)$$

Assume the following.

$$k4\_pepin np\_3 = np\_257 \quad (2)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_3) \wedge (m2\_subset\_1 np\_3 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_3 k5\_numbers) \wedge (m1\_subset\_1 np\_3 k1\_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_257) \wedge (m2\_subset\_1 np\_257 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_257 k5\_numbers) \wedge (m1\_subset\_1 np\_257 k1\_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \end{aligned} \quad (5)$$

Assume the following.

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

Assume the following.

$$k4\_xcmplx\_0 (k4\_xcmplx\_0 np\_3) = np\_3 \quad (7)$$

Assume the following.

$$k3\_xcmplx\_0 np\_257 np\_0 = np\_0 \quad (8)$$

Assume the following.

$$k2\_xcmplx\_0 np\_0 np\_3 = np\_3 \quad (9)$$

Assume the following.

$$\neg r1\_xreal\_0 np\_257 np\_3 \quad (10)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1 X0)\wedge(v7\_ordinal1 X1))\Rightarrow( \quad (12)$$

$$k4\_nat\_d X0 X1 = k6\_int\_1 X0 X1)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1 X0)\wedge(v7\_ordinal1 X1))\Rightarrow( \quad (13)$$

$$k2\_nat\_d X0 X1 = k6\_int\_1 X0 X1)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1 X0 k5\_numbers)\wedge(m1\_subset\_1 \quad (14)$$

$$X1 k5\_numbers))\Rightarrow(k13\_newton X0 X1 = k1\_newton X0 X1)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow((v1\_xcmplx\_0 (k4\_xcmplx\_0 X0))\wedge \quad (15)$$

$$(v1\_xreal\_0 (k4\_xcmplx\_0 X0)))$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0)\Rightarrow(\forall X1.(v7\_ordinal1 X1)\Rightarrow(\forall X2. \quad (16)$$

$$(v7\_ordinal1 X2)\Rightarrow((X2 = k2\_nat\_d X0 X1)\Leftrightarrow(\neg(\forall X3.(v7\_ordinal1$$

$$X3)\Rightarrow(\neg(X0 = k2\_xcmplx\_0 (k3\_xcmplx\_0 X1 X3) X2)\wedge(\neg r1\_xreal\_0$$

$$X1 X2))))\wedge(\neg(X2 = k6\_numbers)\wedge(X1 = k6\_numbers))))))$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (17)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers)\Rightarrow(v1\_xreal\_0 X0) \quad (18)$$

**Theorem 1**  $k4\_nat\_d (k13\_newton np\_3 np\_1) (k4\_pepin np\_3) = np\_3.$