

t104\_sincos10 (TM-  
FWpD8ft7VaVyGzXT1XVhb2k3RRBvGvQti)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k7\_square\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k12\_sincos10 : \iota \Rightarrow \iota$  be given. Let  $k10\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k32\_sin\_cos : \iota$  be given. Let  $np\_4 : \iota$  be given. Let  $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_fdiff\_9 : \iota$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow & (((r1\_xxreal\_0 np\_1 \\ X0) \wedge (r1\_xxreal\_0 X0 (k7\_square\_1 np\_2))) \Rightarrow & (k1\_seq\_1 k2\_fdiff\_9 \\ & (k12\_sincos10 X0) = X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} (k1\_seq\_1 k2\_fdiff\_9 (k1\_real\_1 (k10\_real\_1 k32\_sin\_cos np\_2))) = \\ k1\_real\_1 np\_1) \wedge ((k1\_seq\_1 k2\_fdiff\_9 (k1\_real\_1 (k10\_real\_1 \\ k32\_sin\_cos np\_4))) = k1\_real\_1 (k7\_square\_1 np\_2)) \wedge ((k1\_seq\_1 \\ k2\_fdiff\_9 (k10\_real\_1 k32\_sin\_cos np\_4) = k7\_square\_1 np\_2) \wedge \\ (k1\_seq\_1 k2\_fdiff\_9 (k10\_real\_1 k32\_sin\_cos np\_2) = np\_1)) \end{aligned} \quad (2)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow & (((r1\_xxreal\_0 np\_1 \\ X0) \wedge ((r1\_xxreal\_0 X0 (k7\_square\_1 np\_2)) \wedge (k12\_sincos10 X0 = \\ k10\_real\_1 k32\_sin\_cos np\_4))) \Rightarrow & (X0 = k7\_square\_1 np\_2)) \wedge (( \\ (r1\_xxreal\_0 np\_1 X0) \wedge & ((r1\_xxreal\_0 X0 (k7\_square\_1 np\_2)) \wedge \\ (k12\_sincos10 X0 = k10\_real\_1 k32\_sin\_cos np\_2))) \Rightarrow & (X0 = np\_1)) \end{aligned}$$