

# l64\_sincos10

(TMYK1F4f1SA4a8i57mAbjq2Qe4hufcT7CEM)

October 27, 2020

Let  $k2\_funct\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_sincos10 : \iota$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k2\_fdiff\_9 : \iota$  be given. Let  $k4\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k10\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k32\_sin\_cos : \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v2\_funct\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_partfun2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow ((v2\_funct\_1 X0) \Rightarrow (k2\_funct\_1 (k2\_funct\_1 X0) = X0)) \quad (1)$$

Assume the following.

$$v2\_funct\_1 (k2\_partfun1 k1\_numbers k1\_numbers k2\_fdiff\_9 (k4\_rcomp\_1 k6\_numbers (k10\_real\_1 k32\_sin\_cos np\_2))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1\_funct\_1 X2) \wedge ((v2\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow (k2\_partfun2 X0 X1 X2 = k2\_funct\_1 X2) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow ((v1\_funct\_1 (k2\_partfun1 X0 X1 X2 X3)) \wedge (m1\_subset\_1 (k2\_partfun1 X0 X1 X2 X3) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \quad (4)$$

Assume the following.

$$(v1\_funct\_1 k2\_fdiff\_9) \wedge (m1\_subset\_1 k2\_fdiff\_9 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers))) \quad (5)$$

Assume the following.

$$\begin{aligned} k4\_sincos10 = & k2\_partfun2\ k1\_numbers\ k1\_numbers\ (k2\_partfun1 \\ & k1\_numbers\ k1\_numbers\ k2\_fdiff\_9\ (k4\_rcomp\_1\ k6\_numbers\ (k10\_real\_1 \\ & k32\_sin\_cos\ np\_2))) \end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1 \\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (v1\_relat\_1\ X2) \end{aligned} \tag{7}$$

**Theorem 1**

$$\begin{aligned} k2\_funct\_1\ k4\_sincos10 = & k2\_partfun1\ k1\_numbers\ k1\_numbers\ k2\_fdiff\_9 \\ & (k4\_rcomp\_1\ k6\_numbers\ (k10\_real\_1\ k32\_sin\_cos\ np\_2)) \end{aligned}$$