

# t57\_sincos10 (TMaTRKUdJer- DoZWmxZk3qAYhtLTSVTTYyhR)

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Let  $k1\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_sincos10 : \iota$  be given. Let  $k1\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k7\_square\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k1\_fdiff\_9 : \iota$  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  $np\_4 : \iota$  be given. Let  $k1\_partfun2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  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. Assume the following.

$$\begin{aligned}
 & k3\_relat\_1 (k2\_partfun1\ k1\_numbers\ k1\_numbers\ k1\_sincos10\ (k1\_rcomp\_1 \\
 & \quad np\_1\ (k7\_square\_1\ np\_2)))\ (k2\_partfun1\ k1\_numbers\ k1\_numbers \\
 & \quad k1\_fdiff\_9\ (k1\_rcomp\_1\ k6\_numbers\ (k10\_real\_1\ k32\_sin\_cos\ np\_4))) = \\
 & \quad k1\_partfun2\ k1\_numbers\ (k1\_rcomp\_1\ np\_1\ (k7\_square\_1\ np\_2))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\
 & (((v1\_funct\_1\ X4) \wedge (m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1 \\
 & \quad X0\ X1)))) \wedge ((v1\_funct\_1\ X5) \wedge (m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1 \\
 & \quad X2\ X3)))))) \Rightarrow (k1\_partfun1\ X0\ X1\ X2\ X3\ X4\ X5 = k3\_relat\_1\ X4\ X5)
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1\ X2) \wedge \\
 & \quad (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \Rightarrow ((v1\_funct\_1 \\
 & \quad (k2\_partfun1\ X0\ X1\ X2\ X3)) \wedge (m1\_subset\_1\ (k2\_partfun1\ X0\ X1\ X2\ X3) \\
 & \quad (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))
 \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
 & (v1\_funct\_1\ k1\_sincos10) \wedge (m1\_subset\_1\ k1\_sincos10\ (k1\_zfmisc\_1 \\
 & \quad (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers)))
 \end{aligned} \tag{4}$$

Assume the following.

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

**Theorem 1**

$$k1\_partfun1 k1\_numbers k1\_numbers k1\_numbers k1\_numbers (k2\_partfun1 k1\_numbers k1\_numbers k1\_sincos10 (k1\_rcomp\_1 np\_1 (k7\_square\_1 np\_2))) (k2\_partfun1 k1\_numbers k1\_numbers k1\_diff\_9 (k1\_rcomp\_1 k6\_numbers (k10\_real\_1 k32\_sin\_cos np\_4))) = k1\_partfun2 k1\_numbers (k1\_rcomp\_1 np\_1 (k7\_square\_1 np\_2))$$