

t30\_sin\_cos9  
(TMY3UR7hXYEa8ceBGuevwHPmrosWdtUW2g)

October 27, 2020

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  $k2\_sin\_cos9 : \iota$  be given. Let  $k1\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k30\_sin\_cos : \iota$  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  $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_3 : \iota$  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.

$$\begin{aligned}
 &k3\_relat\_1 (k2\_partfun1 k1\_numbers k1\_numbers k2\_sin\_cos9 (k1\_rcomp\_1 \\
 &\quad (k1\_real\_1 np\_1) np\_1)) (k2\_partfun1 k1\_numbers k1\_numbers \\
 &\quad k30\_sin\_cos (k1\_rcomp\_1 (k10\_real\_1 k32\_sin\_cos np\_4) (k8\_real\_1 \\
 &\quad (k10\_real\_1 np\_3 np\_4) k32\_sin\_cos))) = k1\_partfun2 k1\_numbers \\
 &\quad (k1\_rcomp\_1 (k1\_real\_1 np\_1) np\_1)
 \end{aligned} \tag{1}$$

Assume the following.

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

Assume the following.

$$\begin{aligned}
 &(v1\_funct\_1 k30\_sin\_cos) \wedge (m1\_subset\_1 k30\_sin\_cos (k1\_zfmisc\_1 \\
 &\quad (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))
 \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
 &(v1\_funct\_1 k2\_sin\_cos9) \wedge (m1\_subset\_1 k2\_sin\_cos9 (k1\_zfmisc\_1 \\
 &\quad (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))
 \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1\_funct\_1 X2) \wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow ((v1\_funct\_1 \\ & (k2\_partfun1 X0 X1 X2 X3)) \wedge (m1\_subset\_1 (k2\_partfun1 X0 X1 X2 X3) \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \end{aligned} \tag{5}$$

**Theorem 1**

$$\begin{aligned} & k1\_partfun1 k1\_numbers k1\_numbers k1\_numbers k1\_numbers (k2\_partfun1 \\ & k1\_numbers k1\_numbers k2\_sin\_cos9 (k1\_rcomp\_1 (k1\_real\_1 np\_1) \\ & np\_1)) (k2\_partfun1 k1\_numbers k1\_numbers k30\_sin\_cos (k1\_rcomp\_1 \\ & (k10\_real\_1 k32\_sin\_cos np\_4) (k8\_real\_1 (k10\_real\_1 np\_3 np\_4) \\ & k32\_sin\_cos))) = k1\_partfun2 k1\_numbers (k1\_rcomp\_1 (k1\_real\_1 \\ & np\_1) np\_1) \end{aligned}$$