

# l40\_sincos10

(TMNBm18rRNv6McM1RkRRid7Ra51NSSbpE2n)

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Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_fdiff\_9 : \iota$  be given. Let  $k4\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  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.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (v1\_relat\_1 X2) \Rightarrow ((r1\_tarski \\ & X0 X1) \Rightarrow (k5\_relat\_1 (k5\_relat\_1 X2 X1) X0 = k5\_relat\_1 X2 X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1\_funct\_1 X2) \wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow (k2\_partfun1 \\ & X0 X1 X2 X3 = k5\_relat\_1 X2 X3) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & k2\_rcomp\_1 k6\_numbers (k10\_real\_1 k32\_sin\_cos np\_2) = k1\_relset\_1 \\ & k1\_numbers (k2\_partfun1 k1\_numbers k1\_numbers k2\_fdiff\_9 (k2\_rcomp\_1 \\ & k6\_numbers (k10\_real\_1 k32\_sin\_cos np\_2))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & r1\_tarski (k2\_rcomp\_1 k6\_numbers (k10\_real\_1 k32\_sin\_cos np\_2)) \\ & (k4\_rcomp\_1 k6\_numbers (k10\_real\_1 k32\_sin\_cos np\_2)) \end{aligned} \quad (4)$$

Assume the following.

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

Assume the following.

$$(v1\_funct\_1 \ k2\_fdiff\_9) \wedge (m1\_subset\_1 \ k2\_fdiff\_9 \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ k1\_numbers \ k1\_numbers))) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski \ X0 \ X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1\_subset\_1 \ X2 \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ X0 \ X1))) \Rightarrow (v1\_relat\_1 \ X2) \quad (8)$$

**Theorem 1**

$$r1\_tarski \ (k2\_rcomp\_1 \ k6\_numbers \ (k10\_real\_1 \ k32\_sin\_cos \ np\_2)) \ (k1\_relset\_1 \ k1\_numbers \ (k2\_partfun1 \ k1\_numbers \ k1\_numbers \ (k2\_partfun1 \ k1\_numbers \ k1\_numbers \ k2\_fdiff\_9 \ (k4\_rcomp\_1 \ k6\_numbers \ (k10\_real\_1 \ k32\_sin\_cos \ np\_2)))) \ (k2\_rcomp\_1 \ k6\_numbers \ (k10\_real\_1 \ k32\_sin\_cos \ np\_2))))$$