

t40\_sin\_cos9 (TMJxG-  
Daspn6YWmMjMpxFki7Q3SuWAHY9d4H)

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Let  $k6\_sin\_cos9 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  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  $k2\_sin\_cos9 : \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k4\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k30\_sin\_cos : \iota$  be given. Let  $k2\_sin\_cos4 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_3 : \iota$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_sin\_cos9 : \iota \Rightarrow \iota$  be given. Let  $k31\_sin\_cos : \iota$  be given. Let  $k2\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $v2\_membered : \iota \Rightarrow o$  be given. Let  $v4\_membered : \iota \Rightarrow o$  be given. Let  $v5\_membered : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow ((X0 \in k4\_xxreal\_1 X1 X2) \Leftrightarrow ((\neg r1\_xxreal\_0 X0 X1) \wedge \\ & (\neg r1\_xxreal\_0 X2 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (\neg(\neg r1\_xxreal\_0 X0 k6\_numbers) \wedge \\ & ((\neg r1\_xxreal\_0 k32\_sin\_cos X0) \wedge (\neg(k6\_sin\_cos9 (k1\_seq\_1 k30\_sin\_cos \\ & X0) = X0) \wedge (k6\_sin\_cos9 (k2\_sin\_cos4 X0) = X0)))) \end{aligned} \tag{3}$$

Assume the following.

$$m1\_subset\_1 k1\_xboole\_0 k4\_ordinal1 \tag{4}$$

Assume the following.

$$\begin{aligned}
& (k1\_seq\_1 \ k30\_sin\_cos \ (k10\_real\_1 \ k32\_sin\_cos \ np\_4) = np\_1) \wedge \\
& ((k2\_sin\_cos4 \ (k10\_real\_1 \ k32\_sin\_cos \ np\_4) = np\_1) \wedge ((k1\_seq\_1 \\
& \quad k30\_sin\_cos \ (k8\_real\_1 \ (k10\_real\_1 \ np\_3 \ np\_4) \ k32\_sin\_cos) = \\
& \quad k1\_real\_1 \ np\_1) \wedge (k2\_sin\_cos4 \ (k8\_real\_1 \ (k10\_real\_1 \ np\_3 \ np\_4) \\
& \quad \quad k32\_sin\_cos) = k1\_real\_1 \ np\_1))) \tag{5}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& ((v2\_xxreal\_0 \ np\_1) \wedge (m2\_subset\_1 \ np\_1 \ k1\_numbers \ k5\_numbers)) \wedge \\
& ((m1\_subset\_1 \ np\_1 \ k5\_numbers) \wedge (m1\_subset\_1 \ np\_1 \ k1\_numbers)) \tag{6}
\end{aligned}$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \ X0 \ k1\_numbers) \Rightarrow (k6\_sin\_cos9 \ X0 = k4\_sin\_cos9 \ X0) \tag{7}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{8}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{9}$$

Assume the following.

$$k32\_sin\_cos = k31\_sin\_cos \tag{10}$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xxreal\_0 \ X0) \wedge (v1\_xxreal\_0 \ X1)) \Rightarrow (k2\_rcomp\_1 \ X0 \ X1 = k4\_xxreal\_1 \ X0 \ X1) \tag{11}$$

Assume the following.

$$k10\_real\_1 \ k32\_sin\_cos \ np\_4 \in k2\_rcomp\_1 \ k6\_numbers \ k32\_sin\_cos \tag{12}$$

Assume the following.

$$v6\_membered \ k4\_ordinal1 \tag{13}$$

Assume the following.

$$v1\_xreal\_0 \ k31\_sin\_cos \tag{14}$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xxreal\_0 \ X0) \wedge (v1\_xxreal\_0 \ X1)) \Rightarrow (m1\_subset\_1 \ (k2\_rcomp\_1 \ X0 \ X1) \ (k1\_zfmisc\_1 \ k1\_numbers)) \tag{15}$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (k4\_sin\_cos9 X0 = k1\_seq\_1 k2\_sin\_cos9 X0) \quad (16)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (17)$$

Assume the following.

$$\forall X0.(v3\_membered X0) \Rightarrow (v2\_membered X0) \quad (18)$$

Assume the following.

$$\forall X0.(v4\_membered X0) \Rightarrow (v3\_membered X0) \quad (19)$$

Assume the following.

$$\forall X0.(v5\_membered X0) \Rightarrow (v4\_membered X0) \quad (20)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (21)$$

Assume the following.

$$\forall X0.(v6\_membered X0) \Rightarrow (v5\_membered X0) \quad (22)$$

Assume the following.

$$\forall X0.(v2\_membered X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v1\_xxreal\_0 X1)) \quad (23)$$

**Theorem 1**

$$(k6\_sin\_cos9 np\_1 = k10\_real\_1 k32\_sin\_cos np\_4) \wedge (k1\_seq\_1 k2\_sin\_cos9 np\_1 = k10\_real\_1 k32\_sin\_cos np\_4)$$