

## t22\_sin\_cos3

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Let  $k10\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_numbers : \iota$  be given. Let  $k3\_sin\_cos3 : \iota$  be given. Let  $k5\_complex1 : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_sin\_cos3 : \iota$  be given. Let  $k5\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_complex1 : \iota$  be given. Let  $k1\_xcmplx\_0 : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k3\_xcmplx\_0 X0 k6\_numbers = k6\_numbers) \quad (2)$$

Assume the following.

$$k10\_funct\_2 k2\_numbers k2\_numbers k1\_sin\_cos3 k5\_complex1 = k6\_numbers \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xcmplx\_0 X0) \Rightarrow & (k10\_funct\_2 k2\_numbers k2\_numbers \\ & k3\_sin\_cos3 (k5\_binop\_2 k7\_complex1 X0) = k5\_binop\_2 k7\_complex1 \\ & (k10\_funct\_2 k2\_numbers k2\_numbers k1\_sin\_cos3 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$k7\_complex1 = k1\_xcmplx\_0 \quad (5)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (6)$$

Assume the following.

$$k5\_complex1 = k1\_xboole\_0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0)\wedge(v1\_xcmplx\_0 X1))\Rightarrow( k5\_binop\_2 X0 X1 = k3\_xcmplx\_0 X0 X1) \quad (8)$$

Assume the following.

$$\exists X0.(v1\_xboole\_0 X0)\wedge((v1\_xcmplx\_0 X0)\wedge((v1\_xxreal\_0 X0)\wedge(v1\_xreal\_0 X0))) \quad (9)$$

Assume the following.

$$v1\_xcmplx\_0 k1\_xcmplx\_0 \quad (10)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (11)$$

**Theorem 1**  $k10\_funct\_2 k2\_numbers k2\_numbers k3\_sin\_cos3 k5\_complex1 = k6\_numbers$ .