t46_sin_cos5 (TMaAvxQrVygKE4jjDdU7FPgsjTayrBFRFGF)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k3\_sin\_cos2 : \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_sin\_cos2 : \iota$ be given. Let $k2\_sin\_cos2 : \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xxreal\_0\ X1) \Rightarrow (((r1\_xxreal\_0\ X0\ X1) \wedge (r1\_xxreal\_0\ X1\ X0)) \Rightarrow (X0 = X1))) \tag{2}$$

Assume the following.

$$k1\_seq\_1\ k1\_sin\_cos2\ k6\_numbers = k6\_numbers \tag{3}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{4}$$

Assume the following.

$$\forall X0.k3\_sin\_cos2\ X0 = k2\_sin\_cos2\ X0 \tag{5}$$

Assume the following.

$$\exists X0.(v1\_xboole\_0\ X0) \wedge ((v1\_xcmplx\_0\ X0) \wedge ((v1\_xxreal\_0\ X0) \wedge (v1\_xreal\_0\ X0))) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow ((\neg r1\_xxreal\_0\ X0\ k6\_numbers) \Rightarrow (r1\_xxreal\_0\ k6\_numbers\ (k3\_sin\_cos2\ X0))) \tag{7}$$

Assume the following.

$$\forall X0.k2\_sin\_cos2\ X0 = k1\_seq\_1\ k1\_sin\_cos2\ X0 \tag{8}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xxreal\_0\ X0) \tag{9}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow ((r1\_xxreal\_0\ k6\_numbers\ X0) \Rightarrow (r1\_xxreal\_0\ k6\_numbers\ (k3\_sin\_cos2\ X0)))$$