# t22_sin_cos2 (TMZgAcYkrkJj7ybKK18g2gizZZTb886WCEV)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_sin\_cos2 : \iota$ be given. Let $k9\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (k1\_seq\_1\ k7\_sin\_cos2\ (k10\_binop\_2\ X0\ X1) = k10\_real\_1\ (k9\_real\_1\ (k1\_seq\_1\ k7\_sin\_cos2\ X0)\ (k1\_seq\_1\ k7\_sin\_cos2\ X1))\ (k9\_real\_1\ np\_\_1\ (k8\_real\_1\ (k1\_seq\_1\ k7\_sin\_cos2\ X0)\ (k1\_seq\_1\ k7\_sin\_cos2\ X1))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (k1\_seq\_1\ k7\_sin\_cos2\ (k9\_binop\_2\ X0\ X1) = k10\_real\_1\ (k7\_real\_1\ (k1\_seq\_1\ k7\_sin\_cos2\ X0)\ (k1\_seq\_1\ k7\_sin\_cos2\ X1))\ (k7\_real\_1\ np\_\_1\ (k8\_real\_1\ (k1\_seq\_1\ k7\_sin\_cos2\ X0)\ (k1\_seq\_1\ k7\_sin\_cos2\ X1))))) \tag{2}$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow ((k1\_seq\_1\ k7\_sin\_cos2\ (k9\_binop\_2\ X0\ X1) = k10\_real\_1\ (k7\_real\_1\ (k1\_seq\_1\ k7\_sin\_cos2\ X0)\ (k1\_seq\_1\ k7\_sin\_cos2\ X1))\ (k7\_real\_1\ np\_\_1\ (k8\_real\_1\ (k1\_seq\_1\ k7\_sin\_cos2\ X0)\ (k1\_seq\_1\ k7\_sin\_cos2\ X1)))) \wedge (k1\_seq\_1\ k7\_sin\_cos2\ (k10\_binop\_2\ X0\ X1) = k10\_real\_1\ (k9\_real\_1\ (k1\_seq\_1\ k7\_sin\_cos2\ X0)\ (k1\_seq\_1\ k7\_sin\_cos2\ X1))\ (k9\_real\_1\ np\_\_1\ (k8\_real\_1\ (k1\_seq\_1\ k7\_sin\_cos2\ X0)\ (k1\_seq\_1\ k7\_sin\_cos2\ X1))))))$$