t23_sin_cos4 (TMTPqgvgDJfKbh-gio48FwtGCxMwzn7MsbVT)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k17\_sin\_cos : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_sin\_cos4 : \iota \Rightarrow \iota$ be given. Let $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k20\_sin\_cos : \iota \Rightarrow \iota$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow ((k17\_sin\_cos\ (k2\_xcmplx\_0\ X0\ X1) = k2\_xcmplx\_0\ (k3\_xcmplx\_0\ (k17\_sin\_cos\ X0)\ (k20\_sin\_cos\ X1))\ (k3\_xcmplx\_0\ (k20\_sin\_cos\ X0)\ (k17\_sin\_cos\ X1))) \wedge (k20\_sin\_cos\ (k2\_xcmplx\_0\ X0\ X1) = k6\_xcmplx\_0\ (k3\_xcmplx\_0\ (k20\_sin\_cos\ X0)\ (k20\_sin\_cos\ X1))\ (k3\_xcmplx\_0\ (k17\_sin\_cos\ X0)\ (k17\_sin\_cos\ X1))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0\ X2) \Rightarrow (\forall X3.(v1\_xcmplx\_0\ X3) \Rightarrow (\neg(X0 \neq k6\_numbers) \wedge ((X1 \neq k6\_numbers) \wedge (k2\_xcmplx\_0\ (k7\_xcmplx\_0\ X2\ X0)\ (k7\_xcmplx\_0\ X3\ X1) \neq k7\_xcmplx\_0\ (k2\_xcmplx\_0\ (k3\_xcmplx\_0\ X2\ X1)\ (k3\_xcmplx\_0\ X3\ X0))\ (k3\_xcmplx\_0\ X0\ X1)))))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xreal\_0\ (k20\_sin\_cos\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xreal\_0\ (k17\_sin\_cos\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (k2\_sin\_cos4\ X0 = k7\_xcmplx\_0\ (k20\_sin\_cos\ X0)\ (k17\_sin\_cos\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k3\_xcmplx\_0\ X0\ X1 = k3\_xcmplx\_0\ X1\ X0) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k2\_xcmplx\_0\ X0\ X1 = k2\_xcmplx\_0\ X1\ X0) \tag{7}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{8}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\neg(k17\_sin\_cos\ X0{\neq}k6\_numbers)\wedge((k17\_sin\_cos\ X1{\neq}k6\_numbers)\wedge(k2\_xcmplx\_0\ (k2\_sin\_cos4\ X0)\ (k2\_sin\_cos4\ X1){\neq}k7\_xcmplx\_0\ (k17\_sin\_cos\ (k2\_xcmplx\_0\ X0\ X1))\ (k3\_xcmplx\_0\ (k17\_sin\_cos\ X0)\ (k17\_sin\_cos\ X1))))))$$