

l13_complex2

(TMHDQ6kAPMPf9o4bbAhZULcH3s44rG6KiFQ)

October 27, 2020

Let $k1_comp trig : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_complex1 : \iota \Rightarrow \iota$ be given. Let $k21_sin_cos : \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_sin_cos : \iota \Rightarrow \iota$ be given. Let $k7_complex1 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $k32_sin_cos : \iota$ be given. Assume the following.

$$k6_numbers = k1_xboole_0 \tag{1}$$

Assume the following.

$$m1_subset_1 \ k6_numbers \ k1_numbers \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (\forall X1.(m1_subset_1 \ X1 \ k1_numbers) \Rightarrow \\ & (((X0 \neq k6_numbers) \Rightarrow ((X1 = k1_comp trig \ X0) \Leftrightarrow ((X0 = k2_xcmplx_0 \ (\\ & k8_real_1 \ (k17_complex1 \ X0) \ (k21_sin_cos \ X1)) \ (k3_xcmplx_0 \ (k8_real_1 \\ & (k17_complex1 \ X0) \ (k18_sin_cos \ X1)) \ k7_complex1)) \wedge ((r1_xxreal_0 \\ & k6_numbers \ X1) \wedge (\neg r1_xxreal_0 \ (k8_real_1 \ np_2 \ k32_sin_cos) \ X1)))))) \wedge \\ & ((X0 = k6_numbers) \Rightarrow ((X1 = k1_comp trig \ X0) \Leftrightarrow (X1 = k6_numbers)))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xcmplx_0 \ X0) \tag{4}$$

Theorem 1 $k1_comp trig \ k6_numbers = k6_numbers.$