

l29_complex1 (TMZd- fGxxKB2TSK2StGZ9UEZcL7ovbZHB7U2)

October 27, 2020

Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k3_complex1 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_complex1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcmplx_0 X2) \Rightarrow ((X2 = k2_xcmplx_0 X0 X1) \Rightarrow (k4_complex1 X2 = k7_real_1 \\ & (k4_complex1 X0) (k4_complex1 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcmplx_0 X2) \Rightarrow ((X2 = k2_xcmplx_0 X0 X1) \Rightarrow (k3_complex1 X2 = k7_real_1 \\ & (k3_complex1 X0) (k3_complex1 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (v1_xcmplx_0 (k2_xcmplx_0 X0 X1)) \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow ((\\ & k3_complex1 (k2_xcmplx_0 X0 X1) = k7_real_1 (k3_complex1 X0) (k3_complex1 \\ & X1)) \wedge (k4_complex1 (k2_xcmplx_0 X0 X1) = k7_real_1 (k4_complex1 \\ & X0) (k4_complex1 X1)))) \end{aligned}$$